COMPETENCIES NEEDED BY VOCATIONAL AND TECHNICAL EDUCATION TEACHERS AS RATED BY SELECTED GROUPS

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TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

In the United States the decade of the sixties may well be recorded as one of the most socially turbulent periods of our recent history. The impetus of civil rights, war, inflation, riots, unemployment and dishonour in high positions may have torn strongly at the fabric of American culture. The power institutions of government and economy attempted mending solutions, which were economically based, but did not on the face appear to have significant effects.

Thus, as in the past, when economics appeared to fail, Americans looked to their traditional institutions of home, religion and school as sources of solutions. Perhaps, in reaction to this revived faith, the leaders of many traditional institutions looked for ways to cope, and this normally entailed change.

In the schools of the nation the emphasis on change was quite evident and as America climbed sluggishly in the 1970's the institutions of higher education, and in particular teacher education colleges and universities, began to operationalize their innovations, one of which was the Competency-Based Teacher Education Program. This approach to teacher education was to have all the desirable elements which our society came to place a value on during the sixties. It integrated large areas of knowledge, thus supposedly breaking down the barriers between divisions. It supposedly was more concerned with

exit requirements than entry requirements, thus allowing all the chance to pass. It was called individualized instruction and allowed each person to progress at his own rate.

Houston and Howsam (1972) said, "Rarely, if ever, has any movement swept through teacher education so rapidly or captured the attention of so many in so short a time as has the competency-based movement." The authors also indicated that the approach holds promise of renovating and regenerating teacher education. Of equally significant importance is the fact that it appears to do so in record-setting time.

Statement of the Problem

Several authorities, researchers, and practitioners have addressed the question of identifying teacher competencies that should, could or might be common and unique to all vocational and technical education teachers. However, most efforts have resulted in the generation of voluminous and lengthy lists of possibly incongruent, yet sometimes overlapping competencies. It appears that so far the seemingly unmanageable lists of competencies have been of little functional use to educators in the field. Worse, they are possibly lacking in validity.

Purpose of the Study

The purpose of the study was to identify and validate teaching competencies needed by vocational and technical education teachers in Oklahoma. The identified competencies were rated as to their importance for vocational and technical education teachers by students, teachers, administrators, advisory council members, professional personnel

development council members and State Department of Vocational and Technical Education curriculum staff.

Need for the Study

Cotrell (1971) stated that it has become increasingly difficult to maintain separate departments with each vocational service providing a total professional teacher education program. He further stated that we are in many cases behind the times in offering relevant teacher education curricula based on present day activities and needs of teachers. Additionally, a good curriculum should be comprised of the kinds of competencies vocational and technical teachers can use in effectively educating students. With the uncertainty of economic stability along with scientific and technological advancements, it appears important that new and improved methods of education be implemented.

This study was needed in Oklahoma for several reasons: (1) a validated list of competencies was needed by vocational and technical teacher educators for planning and conducting pre-service and inservice teacher education programs, (2) a validated list of competencies was needed by vocational and technical education teachers for their use in more efficient planning and teaching of their students, (3) State Department of Vocational and Technical Education supervisory staff need a validated list of competencies for use in planning and implementing vocational and technical programs in our schools, (4) advisory councils need a list of competencies for guidance when making recommendations as to addition, deletion or changes in vocational and technical programs,

and (5) administrators need a list of competencies for their use in developing new and better vocational and technical education programs.

Limitations of the Study

The internal validity of the study was limited by how accurately the groups reflected the population and by the techniques used in the study to reflect the data. The external validity of the study was limited by the year in which the study was conducted and by the scope of the population measured. Further, the lengthy questionnaire used to collect the data may have reduced the number of returns.

Objectives of the Study

In order to accomplish the purpose of this study, the following objectives were formulated:

1. To identify teacher competencies needed by vocational and technical education teachers.
2. To validate teacher competencies needed by vocational and technical education teachers in Oklahoma.
3. To determine common competencies needed by vocational and technical education teachers in Oklahoma.
4. To compare competency ratings of the groups used in the study.

Assumption of the Study

It was assumed that vocational and technical education students, teachers, administrators, state advisory council members, state department curriculum staff members and professional personnel development council members were capable of validating the identified teacher competencies.

Operational and Population Definitions

These definitions are the opinions of the researchers who performed studies in competency-based teacher education and of the writer, and are considered to be operational in scope.

Teacher competencies - knowledges, skills, and behaviors possessed by teachers. (Bruce Burke, 1972)

Competency-Based and/or Performance-Based Instruction - a concept with the following characteristics: (1) specification of learner objectives in behavioral terms; (2) specification of the means for determining whether performance meets the indicated criterion levels; (3) provision for one or more modes of instruction pertinent to the objectives, through which the learning activities may take place; (4) public sharing of the objectives, criteria, means of assessment, and alternative activities; (5) assessment of the learning experience in terms of competency criteria; and (6) placement on the learner of the accountability for meeting the criteria. (Houston and Howsam, 1972)

Competency-Based and/or Performance-Based Teacher Education - the application of the principles and practices of competency-based or performance-based instruction to teacher preparation programs. (Houston and Howsam, 1972).

Common elements or competencies - those competencies rated important or higher by all vocational and technical disciplines.

Unique elements or competencies - those competencies that were not rated important or higher by all vocational and technical disciplines.

Students - vocational and technical students who were college or university seniors during the fall, spring and/or summer of 1973 or those who were seniors during the fall of 1973-74.

Teachers - vocational and technical teachers of agriculture, business and office, distributive education, health occupations, home economics, industrial arts, technical education, and trade and industry.

Administrators - superintendents, principals, deans, directors, and/or coordinators of vocational and technical programs in secondary schools and colleges.

Advisory council members - persons, mostly from business and industry, serving on or those recommended to serve on state advisory councils for the separate vocational and technical disciplines.

State department curriculum staff - members of the Curriculum and Instructional Materials Center of the Oklahoma State Department of Vocational and Technical Education who are charged with the responsibility of producing suitable curriculum materials for vocational and technical teachers in Oklahoma and who also cooperate with nine surrounding states in a regional effort in the pooling and exchanging of center developed instructional materials.

Professional personnel development council - a council formed in 1970 to study and make recommendations to the State Director of Vocational and Technical Education to alleviate vocational education professional personnel needs. The council is composed of the Deputy State Director of Vocational and Technical Education, The Assistant State Director in charge of Research, Planning, and Evaluation, one representative from each state institution involved in the preparation of vocational and technical education teachers and administrators, one representative from each of the occupational training areas, the President of the Oklahoma Vocational Association, a local or area vocational-technical administrator, a representative of the State

Advisory Council for Vocational and Technical Education, and a member of the State Board of Vocational and Technical Education.

MIPP VTTE (Model to Improve Pre-service Programs in Vocational and Technical Teacher Education) Committee - a committee comprised of one teacher educator from each of the vocational and technical education disciplines at Oklahoma State University who meet on a regular basis for the purpose of determining ways to improve pre-service programs in vocational and technical teacher education.

Committee of experts - comprised of the MIPP VTTE Committee and the writer's advisory committee.

Vocational and technical disciplines - teacher and/or student groups of specialists in agriculture, business and office, distributive education, health occupations, home economics, industrial arts, technical education, and trade and industry. Student and teacher disciplines may be referred to as student groups and/or teacher groups throughout the study.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Possibly the most significant movement in education today is toward that of competency-based or performance-based teacher education. Educators in colleges and universities across the nation are developing and implementing this type of program. Some of the programs are being implemented in general education, whereas others are being implemented in vocational and technical education.

As a result of reviewing research and literature in this area, this writer is convinced that vocational and technical education is leading the way in the competency-based and/or performance-based movement.

Competency-Based and/or Performance-Based Teacher Education

What is this so called new and exciting approach to teacher education that is supposed to revitalize our waning teacher education programs and save them from their antiquated traditional methodology? Houston and Howsam (1972) stated that it is the application of the principles and practices of competency-based or performance-based instruction to teacher preparation programs. In addition they emphasize the point that competency-based instruction is a simple,

straight-forward concept with the following central characteristics:

(1) specification of learner objectives in behavioral terms;
(2) specification of the means for determining whether performance meets the indicated criterion levels;
(3) provision for one or more modes of instruction pertinent to the objectives, through which the learning activities may take place;
(4) public sharing of the objectives, criteria, means of assessment, and alternative activities;
(5) assessment of the learning experience in terms of competency criteria; and
(6) placement on the learner of the accountability for meeting the criteria.

Briggs (1972) speaking to persons attending a conference on competency-based teacher education in Arlington, Texas, October 4, 1972, made the statement that competency-based teacher education is, in general, "teacher preparation based on identified competency requirements of the classroom teacher." He further stated that the major purposes of the competency-based teacher education movement are at least fourfold. It is an effort:

(1) to improve the quality of new teachers being produced as well as those being upgraded,
(2) to move from a "norm-referenced" to a "criterion-referenced" method of assessment and evaluation of prospective and in-service teacher achievement,
(3) to provide for a more realistic approach to teacher certification, and
(4) to incorporate accountability into teacher education programs--accountability in terms of dollar investments, time investments, and the affective and efficient utilization of institutional facilities and teacher educator talent.

He went on to say that the movement is in part, an outgrowth and adaptation of business and industrial management efforts to cut costs and increase quality and quantity of production or output through various types of "management-by-objectives" schemes.

Bruce Burke (1972) stated that the competency-based curriculum focuses on the learner. He further stated that learning is a very

personal activity and that education will be largely irrelevant unless the human dimension is maintained within it. He also stated that recent research has re-emphasized the wide range of differences among students and that competency-based instruction allows for these differences and takes into account the fact that all persons do not and will not learn at the same rate.

The procedures involved in competency-based instruction are more concerned with exit requirements than entry requirements. Too many years traditionalism has prevailed in that entry into a program has been mandated by meeting some predetermined criteria, such as making specified scores on aptitude tests or having a minimum grade point average. These kinds of restrictions imposed have probably eliminated many potentially excellent teachers.

Need for Change in Traditional Teacher Education

Cotrell and Miller (1969) stated that investigation showed in most instances, "separate preservice and inservice courses are offered for teachers in each of the service areas, the tacit assumption being that the skills and preparation needed by vocational-technical teachers are unique in each of the traditional service areas." However, they further stated that as occupations become more complex and highly technical, they tend to merge across many of the traditional service areas and become hybridized. The Vocational Education Amendments of 1968 spoke to the training needs of people and not to the traditional service areas. The above authors also said:

> ...if teachers are to be trained to fill the present and emerging classroom needs of vocational and technical programs, they must be trained relative to the pedagogical and technical skill needs in that occupational area, and

> not according to dictates of past traditions in professional education.

Furthermore, greater effectiveness and efficiency in the teacher education system must be attained.

Simpson and Ellis (1971) maintained that vocational teacher education is an area of neglect and challenge. Continuing, the authors indicated that major changes are needed if the field of vocational education is to respond to the social problems of the day and the educational needs of those whom it should serve. These changes are necessary in that traditionalism in education has ruled too long. In addition, they stated that the price of preserving old identities has been the failure of the field to respond to its need and challenges.

Kabakjian (1971) wrote in Science Education News that industrial arts, vocational and technical teacher education programs need to be more responsive to the needs of our nation's secondary education programs. He suggested that this can be done by providing a greater number of better qualified teachers to handle the mounting challenge of preparing youth for working in a technical culture.

Barlow (1971) said the role of the institution in teacher education needs to be examined from many points of view. He stated that in some institutions teacher education activities need to be combined and in others expanded to become truly oriented to vocational teacher education. Continuing, he stated that the research role of the institutions must be studied to determine if the institutions are producing researchers rather than teachers. He also felt that institutions should extend their concern for a teacher throughout his professional career. In essence his belief is that the role of the institution must be expanded

and/or redirected to make it fully functional and in accord with the objectives and larger scope of vocational education.

Dr. Felix Robb (1973) speaking to a group of American Vocational Association members in St. Louis, Missouri on April 16, 1973, quoted Dr. Ralph Tyler as saying that the objectives of schools are "to develop decision-making, responsible, self-directing, perceptive, value judging individuals." Robb further stated that such a large order seems improbable of attainment, yet the schools of the 1980's will come closer to hitting the target than their predecessors and that the schools will be better because they will not be afraid to change. Based on Tyler's, Robb's and other's beliefs, it seems apparent that there is a need for a change in our traditional teacher education programs if we are to keep pace with technological changes and societal demands of the future.

Direction of Change

Southworth (1968) in his essay, "Needed: A Revolution in Teacher Education," listed eight steps essential to change in teacher education. Rather than defend the present state of teacher education, he said the educators must provide (1) a new political power base capable of securing adequate finances for quality teacher education, (2) a recruiting system which properly selects and screens talent for teaching, (3) a new system of incentives based on performance and ability rather than years of service and credits earned, (4) a partnership which includes teachers, universities, school districts, communities, and related agencies, (5) data to support or refute the nature of teacher education, (6) a means to study, evaluate and reformulate the teacher education

objectives which will be more responsive to societal changes, (7) adequate procedures and supervision of licensing that will contribute to professional standards and (8) retraining of teachers through graduate inservice opportunities with the total support of the profession.

Meisner (1970), speaking at the fourth annual national vocational-technical teacher education seminar on November 4, 1970, summarized his presentation by saying:

> It seems imperative that we as professional educators in vocational education seek to identify commonalities rather than uniquenesses, for without this base, curricular models or prototypes (core or comparable) will be just another "idea" resulting in little if any change.

He closed his remarks with the question, "Do we want to change?"

Also, Meisner, in a letter to the director of a special project at Oklahoma State University designed to develop a model to improve pre-service programs for vocational and technical teacher education stated, "your project to improve pre-service programs in vocational and technical teacher education appears to be visionary." He also stated that this need exists on virtually every campus where vocational and technical education programs exist.

Cotrell and others (1971) said that a logical strategy for increasing the efficiency of teacher education is to determine the various skills and knowledges needed by all vocational and technical education teachers, which of these skills and knowledges are truly common across several service areas, and which are truly unique to a service area.

Bruce Burke (1972) asserted that school teachers have been caught by the rapid pace of change and find their education did not prepare them for adaptation to new situations. He stated that competency in role versatility, tolerance for ad hoc structures, capacity for

autonomous judgment, i.e., the ability to cope with situations that arise, are the basic personal competencies needed by teachers today. He indicated that these competencies are fostered by a competency-based program. He also felt that underlying these role skills and supporting their effectiveness are the affective skills of empathy, respect and concern for children as people.

Research Studies Conducted

According to Cotrell and others (1971), the Southern States Cooperative Program in Educational Administration originally conceived and developed a competency pattern approach to the improvement of preparatory programs for educational administration. They also reported a study by Beamer in 1956 reconstructing the professional courses in the vocational agriculture teacher education curriculum at the University of Tennessee by gathering data on the importance of certain abilities in teaching vocational agriculture. In addition, they reported Walsh in 1960 identified 107 teaching competencies for trade and industrial teachers in a study which involved the occupational analysis approach. Cotrell and others also stated that Crawford in 1967 identified the competencies needed by distributive education teacher-coordinators to effectively conduct a secondary distributive education program.

In an effort to determine more and efficient and logical teacher education sequences, Cotrell and others (1971) designed a project, "A Study of Common and Unique Elements of Vocational and Technical Education," to critically analyze the skills and knowledges needed by vocational and technical teachers.

They used in their methodology an occupational analysis of the pedagogical functions of teachers; a task force evaluation and review of pedagogical performance elements; a critical incident study to expand, verify and establish support for the performance elements identified through the occupational analysis; and the development of performance-oriented general objectives for model curricula guidelines

The results of their study included 237 performance elements from the occupational analysis technique; identification of common, mixed and unique pedagogical performance elements by a task force representing seven vocational services; the identification of thirty more performance elements and verification of one hundred forty-seven performance elements through a national critical incident study; and the development of two hundred twenty-six performance-oriented general objectives.

Conclusions of the study indicated that most pedagogical performance requirements for teachers were common to all vocational services and meaningful objectives (performance goals or behavioral objectives) could not be developed without consideration for a particular institutional setting.

Halfin and Courtney (1971) conducted a study in 1970 to determine the common training needs and requirements for teachers of vocational education. They arbitrarily selected ten states from which they chose fifteen teachers per state (three teachers each from disciplines of home economics, vocational agriculture, trade and industry, distributive and business education), to participate in the study. Teachers responded with a judgmental assignment of scores to a list of one hundred and thirty items relating to skills and knowledge for their work. The assignment of ratings by teachers was based on a Likert-type scale ranging from "no

proficiency" to "complete proficiency." They had conducted a study in four states in 1969 with similar results.

Primary conclusions of the study were: (1) items tended to cluster into common groupings; (2) commonalities found within the five disciplines tended to verify the thought that several elements within the various training programs may logically be offered in a common training effort. The need for proliferating courses to accommodate the instruction within the various disciplines seemed both undesirable and unnecessary.

Pope (1971) conducted a study in Texas which sought to identify areas of commonality across several vocational and technical service areas. In all, thirteen hundred and seventy-one full-time secondary vocational and technical teachers were sampled to determine what performance elements were considered important for their success as teachers in their area. He reported a substantial overlap of common skills and knowledge judged to be important to several programs. One hundred ninety-nine of the two hundred eighty-seven performance elements rated as important by at least one program met the criteria establishing them as important across all program areas. There were two hundred and twenty-eight elements rated as important to four or more programs.

Vogler (1972) reported the University of Michigan's movement in competency-based teacher education. He stated that Michigan's occupational education program underwent drastic revisions. They combined the best of the old and the new in teacher education. Their theme was a comprehensive across-the-service-area approach. The program did not distinguish between service areas in the course content. Common

professional teaching competencies are focused upon and application to specific service areas is identified through student instructional interaction. They have a work experience program in that students are encouraged to work part-time during their training to help maintain occupation competence.

Continuing, Vogler reported that Michigan used Cotrell's list of competencies to establish curriculum content. Two hundred and sixty-nine of Cotrell's competencies were utilized which served as instructional topics whereas learning experiences resulted in acquisition of competencies.

Caseel Burke (1972) reported that Weber State College initiated an Individualized Performance-Based Teacher Education Program in the autumn of 1970. This program is the only route to teacher certification at the college. According to Burke the purpose of the program was not the complete rejection of more traditional educational programs, but to develop the potential teacher to his fullest through a new and innovative program.

Faculty members analyzed, identified and selected topics, skills, concepts, attitudes, etc., they thought would be pertinent for a course. They identified approximately eighty topics and three hundred behavioral objectives which they used in developing more than seventy learning modules called WILKITS (Weber Individualized Learning Kits). Burke further reported that another important aspect of the program was the "Interaction Laboratory" for students. Some students said the laboratory experiences were the most gratifying of any college experience.

Proehl (1972) reported of common competencies, behaviors and skills that should be exhibited by students completing a program in vocational

or adult general education in Florida. Eight common behaviors and twenty-seven elements of common knowledge, skills and attitudes that should be exhibited by a teacher in helping a student to develop the desired behaviors were identified. In addition, seventeen teacher education experiences needed to equip the teacher with the knowledge, skills and attitudes were identified.

Cooke and colleagues (1972) developed a competency-based teacher education program at Wayne State University in Detroit, Michigan, in January, 1971. They reorganized their three former departments, Business and Distributive Education, Family Life Education, and Industrial Education into what they called "The Department of Vocational and Applied Arts Education."

The procedure they used in developing the competency-based program was to select teaching competencies they thought would be important for teacher education students to learn. They utilized Cotrell's list of two hundred fifty-five competencies and from this list selected seventy-five for their use. These seventy-five competencies were analyzed and two hundred sixty-four performance objectives were developed to aid in the actual instruction of the competencies.

The program was divided into two components: (1) an instructional system and (2) a management information system. The instructional system had five elements--competencies, performance objectives, needs assessment, delivery systems, and evaluation. The management information system had as its main purpose the selection, storing, processing and transmitting of data to the faculty at a time when it could most efficiently be used, enabling them to make more accurate decisions.

The program of competency-based teacher education at Wayne State is fully operationalized in vocational and applied arts. Evaluation as to effectiveness has not been accomplished but plans have been made to thoroughly evaluate the program as soon as it is feasible.

Wilson and Curtis (1973) reported that according to a survey made in the spring of 1973 among all fifty states, eleven states have now mandated competency-based or performance-based programs for the preparation of teachers and administrators. These states are Alabama, California, New York, North Carolina, Oregon, Pennsylvania, South Dakota, Tennessee (for administrators only), Texas, Vermont, and Washington. Some of these mandates are now in effect while dates have not been set for the others. In addition some of these mandates affect both preservice and inservice education.

The authors also reported that a number of other states are contemplating mandated programs. Among them are Illinois, Louisiana, Maryland, Nevada, New Mexico, Wisconsin, and Georgia. In addition, the Iowa State Department of Education plans to encourage the development of such programs in the future. Arizona indicated its State Board of Education mandate would cover only recertification of administrators and teachers. Also Nebraska reported that performance-based statements for each teaching specialization were being required.

The authors reported that Oklahoma indicated a small amount of competency-based teacher education was being developed by one university. The authors did not indicate which university, however, this writer believes that they had reference to Oklahoma State University and the MIPP VTTE project being conducted.

The authors also stated that Montana had indicated one teacher preparatory institution was developing a five-year plan for administrators and teachers. Also, Kentucky reported having had competency-based and performance-based programs for many years. Colorado feels part of its administrator and teacher preparatory programs are competency-based. Minnesota reported that rather than mandate a state plan, they would allow groups to move at their own pace. Still, according to the authors, only one state, Florida, indicated that performance-based programs are presently an alternate way of certification for their entire state.

Summary

We are becoming more and more aware of the competency-based movement as it gains momentum in our colleges and universities. It appears that teacher educators and pre-service teacher trainees are beginning to express their dissatisfaction with our traditional teacher training programs.

As a result of this dissatisfaction, teacher educators in many colleges and universities throughout the United States are implementing or are attempting to implement a new and exciting program of competency-based teacher education. Some of these programs are being initiated in general education, whereas others are being implemented in vocational education. In reviewing the literature and examining programs of this type the writer is convinced that vocational education is leading the way in the competency-based movement.

Early studies into the competency-based approach by the Southern States Cooperative Program in Educational Administration, by Beamer,

Walsh and Crawford helped set the stage for later studies of common and unique competencies conducted by Halfin and Courtney, Cotrell and colleagues, Pope and others. All of these studies and others have resulted in the initiating of competency-based programs in many colleges and universities in the United States.

New York, Florida, Texas and other states are looking to certification based upon teachers exhibiting specific competencies believed to be those that should be possessed by teachers in order to effectively teach students. Whatever happens, whether it be competency-based teacher education and/or certification via exhibiting competencies, we must remember that the competency-based movement will not be a cure for all educational ills. According to Burns (1972), "In the final analysis Competency-Based Teacher Education will produce proof of its own superiority or will recede to the obscurity of failure." He contends that we can only hope the observers and critics will wait for the evidence and judge it fairly.

CHAPTER III

METHODOLOGY

Introduction

The primary purpose of this study was to identify and validate competencies needed by vocational and technical education teachers in Oklahoma. The specific objectives were:

1. To identify teacher competencies needed by vocational and technical education teachers.
2. To validate teacher competencies needed by vocational and technical education teachers in Oklahoma.
3. To determine common competencies needed by vocational and technical education teachers in Oklahoma.
4. To compare competency ratings of the groups used in the study.

In order to identify competencies believed to be needed by vocational and technical education teachers, the writer reviewed and analyzed teacher competencies contained in research studies conducted by Cotrell (1971), Halfin and Courtney (1971), Pope (1971), Cook (1972), Oklahoma State University, Oregon, and others.

To validate the teacher competencies, the writer asked selected groups of persons to rate the competencies as to their importance for teachers of vocational and technical education. To determine common

competencies, the ratings of students and teachers were used. In order to fulfill objective number four, a visual comparison of the competencies between and among groups was conducted to see if any marked differences in ratings existed.

Instrumentation

Of the questionnaires and studies reviewed by the writer, it appeared that a modification of Cotrell's original list of competencies, with face validity established by a group of experts, might be the best approach in developing a valid and reliable instrument for obtaining judgments.

The writer, with the help of the Director of the MIPP VTTE project, who is a member of the writer's advisory committee, developed a tentative questionnaire using Cotrell's original list of competencies. The writer then presented a copy of the questionnaire to each member of the MIPP VTTE committee and his advisory committee. Each person was asked to review and refine the instrument by adding, deleting and/or changing it in any way he or she saw need for its improvement. Several competencies were added to the questionnaire as a result of suggestions from persons who reviewed the questionnaire.

After the review and revisions had been accomplished, the questionnaire was developed into an instrument comprised of 92 competencies believed to be needed by vocational and technical education teachers in Oklahoma. The competencies were grouped into nine areas as follows: planning, execution, evaluation, guidance, management, public and human relations, professional role, student vocational organizations, and general school activities.

Examples of competencies used in the questionnaire were as follows:

The Teacher Will:

1. Identify from an occupational analysis, the skills and information to be taught for an appropriate occupation.

2. Determine the need for and identify resource persons.

A rating scale for the questionnaire was as follows: no importance, some importance, important, very important, and extremely important.

The instrument was field tested with six randomly selected state department personnel. The personnel were from the areas of industrial arts, business and office, research, curriculum, and distributive education. The results of the ratings showed no apparent differences and/or problems. Completion time ranged from seven to twelve minutes. (See Appendix A for sample questionnaire.)

Selection of Respondents

The methodology of the past studies did not always allow for the input of all concerned populations. It seemed logical that students, teachers, administrators, business and industry people, state department curriculum staff and other professional persons involved in vocational and technical education should be surveyed for their judgments. Further, it should be of research interest to decision makers to know if the groups differed in their opinions as to the importance on each identified teacher competency.

In an effort to include personnel in the study who were involved with and knowledgeable about vocational and technical education needs, the following groups of persons from Oklahoma were selected:

1. Vocational and technical education students from Oklahoma State University and Central State University who (a) had completed student teaching during 1972-73 or (b) were seniors during 1972-73 or (c) were to be seniors during 1973-74. Most of the students in the study had completed student teaching during 1972-73. A total of 213 students was surveyed.
2. A random sample of 30 teachers from each of the eight vocational and technical disciplines. A total of 240 teachers was sampled.
3. An administrator from the schools in which the vocational and technical teachers used in the study were employed. A total of 132 administrators was surveyed.
4. Persons, mostly from business and industry, serving on, or those recommended to serve on state advisory councils for the separate vocational and technical disciplines. A total of 36 persons was surveyed.
5. The professional personnel development council comprised of 25 persons.
6. The Oklahoma State Department of Vocational and Technical Education Curriculum and Instructional Materials Center Staff comprised of 12 persons.

Response data is shown in Table I.

An attempt was made to survey students who had completed student teaching during 1972-73. However, in order to get a large enough number of distributive education, technical education, and trade and industry students, 1972-73 seniors and students who were to be seniors during 1973-74, even though they had not done student teaching, were surveyed.

TABLE I

RESPONSE DATA

Group	Persons Surveyed	Number Respondents	Response Percent
TOTAL GROUP:			
Vocational and Technical Teachers	240	173	72.1
Vocational and Technical Students	213	167	78.4
Administrators	132	98	74.2
Advisory Council Members	36	25	69.4
State Department of Vo-Tech Curriculum Staff	12	12	100.0
Total Persons Surveyed	658	497	75.5
TEACHER GROUP:			
Agriculture	30	22	73.0
Business and Office	30	24	80.0
Distributive Education	30	25	83.3
Health Occupations	30	18	60.0
Home Economics	30	26	86.7
Industrial Arts	30	16	53.3
Technical Education	30	15	50.0
Trade and Industry	30	27	90.0
STUDENT GROUP:			
Agriculture	39	39	100.0
Business and Office	46	29	63.0
Distributive Education	14	14	100.0
Home Economics	43	35	81.4
Industrial Arts	23	19	82.6
Technical Education	36	22	61.1
Trade and Industry	12	9	75.0

In order to determine the teacher sample, the writer used the table of random numbers found in Popham's text (1967) and randomly selected 30 teachers from each of the eight vocational and technical disciplines as listed in the personnel directory of the Oklahoma State Department of Vocational and Technical Education. In addition, an administrator from each of the schools from which a vocational and technical teacher had been sampled was selected and used.

Business and industry personnel were selected on the basis of their serving on a state advisory council or having been recommended to serve on a state advisory council. These persons are people interested in and possessing an appreciable amount of knowledge about vocational and technical education.

The Curriculum and Instructional Materials Center staff of the State Department of Vocational and Technical Education was selected because of its close working relationship with vocational and technical teachers and teacher educators.

The professional personnel development council members were chosen because of their interest in and advisory capacity to the State Department of Vocational and Technical Education on professional personnel needs of vocational and technical educators.

Collection of Data

A questionnaire of identified teacher competencies was mailed to each of the persons surveyed during the spring and summer of 1973 with the exception of the agriculture and distributive education students and industrial arts teachers. The agriculture students were administered the questionnaire while attending a meeting with their teacher

educators prior to the close of the spring 1973 semester. The distributive education students were administered the questionnaire by a distributive education teacher educator while attending class at Central State University prior to the close of the spring 1973 semester. The industrial arts teachers were sampled during the latter part of August, 1973 via mailout. (Refer to Appendix A for sample questionnaire.)

A cover letter explaining the purpose of the study and a stamped envelope were sent with each mailed questionnaire. In the letter respondents were asked to rate the competencies in the questionnaire and return the questionnaire to the writer. (Refer to Appendix B for sample letter.)

In addition to rating the competencies the respondents were asked to list any comments or additional competencies they thought were important to vocational and technical teachers on the last page of the questionnaire. (See Appendix C for comments.)

Students and teachers were asked to rate the competencies as to their importance for teachers in their teaching field. Administrators, advisory council members, curriculum staff members and the professional personnel development council were asked to rate the competencies as to their importance for all vocational and technical education teachers. The rating scale on the questionnaire ranged from a low of no importance to a high of extremely important.

By July 15, 1973, 67.2 percent of the questionnaires had been returned. A follow-up letter to the students and teachers except industrial arts teachers who were non-respondents was sent the first part of August, 1973. The writer considered it not necessary to conduct

a follow-up of the persons in the other groups due to their high rate of returns. (See Appendix D for sample letter.)

A follow-up letter was sent to the industrial arts teachers on September 11, 1973. Three more industrial arts teachers returned completed questionnaires by September 17. Two additional questionnaires were returned not completed from industrial arts teachers, one because the person was no longer teaching and the other because the school no longer had an industrial arts program. (See Appendix D for sample letter.)

On September 17, 1973, it was determined that 497 of the 658 questionnaires were usable for calculation of the data. This total of 497 represented 75.5 percent of the persons surveyed.

The criteria for judging whether a competency was important to a given discipline or group were established in consultation with the MIPP VTTE committee and the writer's advisory committee. An item was considered to be very important if it was rated 3.50 or higher. An item was considered to be important if it was rated 2.50 through 3.49. An item was considered to be of little or no importance if it was rated less than 2.50.

The criteria for judging whether a competency was common to a student or teacher discipline were also established in consultation with the MIPP VTTE committee and the writer's advisory committee. An item was considered common if it was rated important or higher by all disciplines, including teacher groups and student groups. An item was not considered common to a discipline or disciplines if it was not rated important or higher by all disciplines.

Treatment of the Data

The questionnaire was comprised of 92 statements of teacher competencies to which the persons used in the study responded on a Likert-type scale which was a continuum from no importance to extremely important. In order to permit treatment of the data, numerical values were assigned to the response categories as follows:

No Importance = 1

Some Importance = 2

Important = 3

Very Important = 4

Extremely Important = 5

The data from the questionnaires were keypunched for computer processing. The frequency and percentage response to each item were computed for each of the groups used in the study. Also a mean rating was computed for each item by student and teacher disciplines and groups. In addition, a mean rating was computed for each item with the composite teacher group and composite student group. Also a composite mean rating was computed for each item for all groups. (See Appendix E for mean ratings of student and teacher disciplines.)

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this study was to identify and validate teaching competencies needed by vocational and technical education teachers in Oklahoma. In order to accomplish this purpose the following specific objectives were formulated:

1. To identify teacher competencies needed by vocational and technical education teachers.
2. To validate the teacher competencies needed by vocational and technical education teachers in Oklahoma.
3. To determine common competencies needed by vocational and technical education teachers in Oklahoma.
4. To compare competency ratings of the groups used in the study.

The phases of the study consisted of instrumentation, selection of respondents, collection of data, treatment of the data, and presenting and analyzing the data.

Analysis of Teacher Data

The first step in analyzing the data consisted of selecting the common competencies as determined by the established criteria. Based on the criterion that competencies were important if rated 2.50 or higher by any group, it was determined that 87 competencies (94.5

percent) out of the 92 rated by the teacher groups met the criterion. (See Appendix E for mean responses of competencies by teacher groups.) These 87 competencies, then, comprise a core of competencies common to all teacher groups. These common competencies are presented in Table II. A discussion of the competencies is included in the remarks on the following pages.

It was interesting that 30 (34.5 percent) of the 87 items determined to be common competencies by the teacher groups were rated very important (3.50 or higher) by all teacher groups. These items have an asterisk preceding them as shown in Table II. It was also noted that 24 of these 30 competencies were rated very important by all student groups. These 24 competencies are so indicated by having two asterisks in front of the items as listed in Table II.

Of further interest is that all teacher groups rated eight of the thirteen items in the planning area as very important. Teachers considered the selection of media and aids as well as selection of tools and equipment as being very important. They also considered the identification of competencies necessary for students and forming objectives of the vocational and technical program as being very important. They considered determining educational needs and goals of students, and selecting and developing instructional content for lessons, units and courses as being very important. All groups judged organizing the sequence of learning tasks and developing a variety of methods and techniques of teaching as being very important.

Of the 17 items in the execution area, six were considered to be very important by all teacher groups. Of those items related to instructional methods, they considered demonstrations, laboratory experiences,

TABLE II

THE COMMON, IMPORTANT AND VERY IMPORTANT COMPETENCIES AS IDENTIFIED BY ALL TEACHER GROUPS

Item Number	Competency
	The Teacher Will:
	PLANNING:
1.	Organize and utilize an advisory council in planning course content.
2.	Use the advisory council in keeping abreast of new developments in vocational and technical education.
3.	Identify from an occupational or task analysis the skills and information to be taught for an appropriate occupation.
**4.	Identify competencies needed for students to possess to enable them to enter an occupational skill.
**5.	Determine educational needs and goals of students.
*6.	Form objectives of the vocational and technical education program.
*7.	Select and develop instructional content for lessons, units and courses.
**8.	Develop a variety of methods and techniques of teaching.
*9.	Organize the sequence of learning tasks.
**10.	Determine and select tools and equipment necessary for the learning experiences of students.
**11.	Determine and select the instructional media and aids for student learning experiences.
12.	Develop procedures for working with disadvantaged students.
13.	Develop safety rules and regulations.
	EXECUTION:
14.	Direct group discussions.
15.	Moderate panel discussions.
**16.	Use demonstrations in the learning experiences.
17.	Conduct field trips for learning experiences.
18.	Direct role playing.
19.	Present lectures.
21.	Identify, select and use resource persons to present information.

*Rated very important (3.50 or higher) by all eight teacher groups.

**Rated very important (3.50 or higher) by all teacher and student groups.

TABLE II (CONTINUED)

Item Number	Competency
22.	Use a multiple of audiovisuals.
23.	Set up displays to present occupational information.
24.	Direct programmed instruction (teaching machine or text).
**25.	Direct laboratory experiences.
**26.	Maintain and use safety rules and regulations.
**27.	Recognize, interpret and utilize student actions and behaviors (cues).
**28.	Reinforce learning through positive reinforcement techniques.
29.	Reproduce instructional materials using various reproduction equipment.
**30.	Properly maintain facilities and equipment.
EVALUATION:	
**31.	Evaluate text and reference materials to meet course objectives.
*32.	Establish the evaluative criteria for lessons, units and courses.
33.	Determine if evaluative criteria exist and select measures appropriate to the evaluative criteria.
**34.	Establish criteria and methods for classroom or shop-laboratory performances.
35.	Establish criteria for student self-evaluation.
36.	Direct student self-evaluation.
37.	Interpret evaluation data for students and parents.
**38.	Evaluate one's own techniques and methods of teaching.
**39.	Evaluate student's progress in class, home and laboratory assignments.
40.	Form a variety of testing methods, both objective and subjective.
**41.	Evaluate classroom facilities and equipment.
GUIDANCE:	
42.	Interview students and parents.
43.	Evaluate all data about students for selective purposes.
44.	Select and assign students for the program.
45.	Assemble and display occupational information.
46.	Present related occupational information.
47.	Provide students with resource materials on occupational opportunities.

*Rated very important (3.50 or higher) by all eight teacher groups.

**Rated very important (3.50 or higher) by all teacher and student groups.

TABLE II (CONTINUED)

Item Number	Competency
48.	Refer students to guidance counselors or other qualified personnel for occupational and education information.
50.	Assist students with personal and social problems.
51.	Assist students with scholastic problems.
*52.	Establish an open door counseling policy.
53.	Assist students in seeking employment.
54.	Collect and disseminate student follow-up data.
55.	Utilize follow-up data to up-date, improve and revise the curriculum.
MANAGEMENT:	
*56.	Define the operating rules and responsibilities of the learner and teacher.
**57.	Determine short and long range supply, equipment and facility needs.
58.	Consult the advisory council in planning facilities, equipment and supply needs.
59.	Maintain a running inventory of supplies and equipment.
60.	Develop and implement a policy for use of facilities, equipment and supplies.
61.	Record and file cumulative student progress data.
62.	Develop and maintain placement and follow-up data.
63.	Develop and maintain occupational opportunities files.
65.	Conduct student learning activities to achieve established goals, needs and objectives.
PUBLIC AND HUMAN RELATIONS:	
**66.	Interpret and promote vocational and technical education within the school and community.
**67.	Develop acceptable working relationships with students, staff and others connected with the school.
68.	Keep community and school informed of new developments in vocational and technical education using a variety of methods and techniques.
69.	Maintain liaison with community members and professional, service, fraternal, social and religious organizations.
70.	Serve as a resource person to the community agencies and organizations.

*Rated very important (3.50 or higher) by all eight teacher groups.

**Rated very important (3.50 or higher) by all teacher and student groups.

TABLE II (CONTINUED)

Item Number	Competency
71.	Maintain liaison with employment agencies.
72.	Maintain liaison with business and industry.
73.	Consult the advisory council periodically to get their expectations of the vocational and technical program.
74.	Serve in community, civic, service or social organizations to improve the image of vocational and technical programs.
75.	Maintain good public relations with parents.
PROFESSIONAL ROLE:	
**76.	Plan a personal continuing educational program.
**77.	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.
**78.	Keep credentials up to date.
**79.	Support professional organizations through membership and active participation.
80.	Attempt to improve the image of vocational and technical education programs through active membership in professional organizations.
**81.	Practice professionalism with school personnel and others.
82.	Participate in and/or plan an inservice education program.
STUDENT VOCATIONAL ORGANIZATIONS:	
83.	Secure approval from administration for establishing a student vocational organization.
84.	Organize and promote school and community support for a student vocational organization.
85.	Help students plan a meeting for and organize a student vocational organization.
86.	Help establish and assist in conducting a program of work for a student vocational organization.
87.	Conduct leadership development seminars for student vocational organization members.
88.	Encourage affiliation of the student organization with state and national activities.
89.	Coordinate student vocational organization activities with instructional activities.

*Rated very important (3.50 or higher) by all eight teacher groups.

**Rated very important (3.50 or higher) by all teacher and student groups.

TABLE II (CONTINUED)

Item Number	Competency
GENERAL SCHOOL ACTIVITIES:	
92.	Supervise student teaching and cooperate with colleges and universities in providing learning experiences for student teachers.

*Rated very important (3.50 or higher) by all eight teacher groups.

**Rated very important (3.50 or higher) by all teacher and student groups.

use of cues, and reinforcement of learning through positive reinforcement techniques as being very important. In addition they considered proper maintenance of facilities and equipment and the use of safety rules as being very important.

There were six of eleven items in the evaluation area considered very important by all teacher groups. They considered evaluation of text and reference materials as being very important. They also considered establishing evaluative criteria for lessons, units and courses as being very important. In addition, the considered evaluation of classroom, facilities and equipment as being very important. They also considered evaluation of one's own techniques and methods of teaching as being very important.

Only one of the fourteen items in the guidance area was considered very important by all teacher groups. They considered the establishing of an open door counseling policy as being very important.

All teacher groups considered two of the nine items in the management area as being very important. They considered defining the operating rules and responsibilities of the learner and teacher as being very important. In addition, they considered the determining of short and long range supply, equipment and facility needs as being very important.

In the public and human relations area, two of ten common competencies were considered very important by all teacher groups. They also considered interpreting and promoting vocational and technical education within the school and community as being very important. In addition, they said that developing acceptable working relationships with students, staff and others connected with the school was very important.

In the professional role area, five of the seven common items were considered very important by all teacher groups. They thought that planning a personal continuing educational program, acquiring new skills and competencies, and keeping credentials up to date were very important. They also considered the support of professional organizations through active membership as being important. In addition, they considered the practicing of professionalism with school personnel and others as being very important.

None of the common competencies in the student vocational organization area were considered as very important by all teacher groups. No item in the general school activities area was considered as very important by any teacher group. There were, however, only three items in this area for teachers to rate.

The following listed table of teacher data, Table III, shows the number of items in each competency area, the number of items rated important or higher by each teacher group and the number of items common to all teacher groups.

Of particular interest is that teachers of agriculture, home economics and trade and industry considered all competencies to be important or higher. Teachers of business and office and health occupations rated 90 (98.9 percent) of the competencies as important or higher. In addition, teachers of technical education rated 88 (95.6 percent) of the items important or higher, while industrial arts teachers rated 89 (96.7 percent) of the competencies important or higher. Teachers of distributive education rated 90 (97.8 percent) of the items important or higher.

TABLE III

NUMBER OF ITEMS IN EACH COMPETENCY AREA COMPARED WITH THE NUMBER OF ITEMS RATED IMPORTANT OR HIGHER BY TEACHER GROUP AND NUMBER OF ITEMS COMMON TO ALL TEACHER GROUPS

Competency Areas	Number of Items in Competency Area	Number of Items Rated Important or Higher by Teacher Group								No. of Items Common to all Teacher Groups
		Agri.	B & O	DE	HOE	Home Ec.	IA	Tec. Ed.	T & I	
Planning	13	13	13	13	13	13	13	13	13	13
Execution	17	17	16	16	17	17	16	16	17	16
Evaluation	11	11	11	11	11	11	11	11	11	11
Guidance	14	14	13	14	13	14	13	13	14	13
Management	10	10	10	10	9	10	10	9	10	9
Public and Human Relations	10	10	10	10	10	10	10	10	10	10
Professional Role	7	7	7	7	7	7	7	7	7	7
Student Vocational Organizations	7	7	7	7	7	7	7	7	7	7
General School Activities	3	3	3	3	3	3	2	2	3	1
Total	92	92	90	91	90	92	89	88	92	87
Percent	100	100	97.8	98.9	97.8	100	96.7	95.6	100	94.5

Items not common to all teacher disciplines are shown in Table IV. Of interest is that only five of the 92 items rated by the teacher groups did not meet the criterion and were, therefore, not common to all groups.

It is of further interest that teachers of business and office, distributive education, industrial arts and technical education rated item number 20, "conduct home visits," as being of little or no importance. Teachers of health and trade and industry rated the item 2.56 and 2.59 respectively. Teachers of agriculture and home economics were more impressed with the item and rated it very important with ratings of 4.68 and 3.58 respectively.

Item number 49, "conduct visits to students' homes regarding student educational development," was rated as being of little or no importance by teachers of business and office, health, industrial arts and technical education. Teachers of distributive education, trade and industry and home economics considered the item important with respective ratings of 2.56, 2.74 and 3.31. Teachers of agriculture considered the item very important with a rating of 3.95.

Teachers of health and technical education rated item number 64, "group students according to individual differences," as being of little or no importance. Teachers of agriculture, distributive education, home economics, industrial arts, trade and industry and business and office considered the item important with ratings of 2.55, 2.84, 2.73, 2.88, 2.67 and 3.04 respectively.

Technical education teachers represented the only teacher group rating item number 90, "participate in non-instructional school duties, i.e., PTA, chaperoning," as being of little or no importance. Teachers of agriculture, business and office, distributive education, health,

TABLE IV

COMPETENCIES NOT COMMON TO ALL TEACHER DISCIPLINES

Competency Area	Item No.		Group Responding	Mean Response
Execution	20.	Conduct home visits	Agri.	4.68
			B & O	2.25
			DE	2.40
			HOE	2.56
			Home Ec.	3.58
			Ind Arts	1.75
			Tec. Ed.	1.93
			T & I	2.59
Guidance	49.	Conduct visits to students' homes regarding student educational development	Agri.	3.95
			B & O	2.29
			DE	2.56
			HOE	1.94
			Home Ec.	3.31
			Ind. Arts	2.13
			Tec. Ed.	1.93
			T & I	2.74
Management	64.	Group students according to individual differences	Agri.	2.55
			B & O	3.04
			DE	2.84
			HOE	2.39
			Home Ec.	2.73
			Ind. Arts	2.88
			Tec. Ed.	2.33
			T & I	2.67
General School Activities	90.	Participate in non-instructional school duties, i.e., PTA, chaperoning	Agri.	2.95
			B & O	2.92
			DE	3.24
			HOE	3.13
			Home Ec.	3.38
			Ind. Arts	2.56
			Tec. Ed.	2.40
			T & I	2.93
	91.	Sponsor non-vocational clubs, societies and special interest groups	Agri.	2.68
			B & O	2.58
			DE	2.52
			HOE	2.63
			Home Ec.	2.54
			Ind. Arts	2.31
			Tec. Ed.	2.60
			T & I	2.67

home economics, industrial arts and trade and industry considered the item important with respective ratings of 2.95, 2.92, 3.24, 3.13, 3.38, 2.56 and 2.93.

Item number 91, "sponsor non-vocational clubs, societies and special interest groups," was rated by teachers of industrial arts as being of little or no importance. The other seven teacher groups rated the item important, however, their ratings ranged from 2.52 to 2.68.

Tables V through XII list the ranked top ten percent of competencies rated by teacher groups. Because of tied ranks some tables include more than ten percent of the competencies.

Table V shows the ranked top ten percent of competencies rated by agriculture teachers. They rated item number one "maintain and use safety rules and regulations" the highest with a mean rating of 4.86 and a rank of one. Other items in the area of execution in the top ten percent were conduct home visits, use demonstrations and conduct field trips. In the area of public and human relations, the agriculture teachers rated maintaining good public relations with parents; developing acceptable working relationships with students, staff and others; and interpreting and promoting vocational and technical education within the school and community in the top ten percent. They also rated two items in planning, "develop a variety of methods and techniques of teaching," and "determine educational needs and goals of students" in the top ten percent. In addition, they rated one item from the evaluation area, "evaluate one's own techniques and methods of teaching," in the top ten percent.

The ranked top ten percent of competencies rated by business and office teachers are indicated in Table VI. It is interesting to note

TABLE V

RANKED TOP TEN PERCENT OF COMPETENCIES
RATED BY AGRICULTURE TEACHERS

Item No.	Area	Competency	Average Rating	Rank
26	Ex	Maintain and use safety rules and regulations.	4.86	1
20	Ex	Conduct home visits.	4.68	2
75	PHR	Maintain good public relations with parents.	4.59	3
38	Ev	Evaluate one's own techniques and methods of teaching.	4.45	4
67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.45	4
8	P	Develop a variety of methods and techniques of teaching.	4.41	6
66	PHR	Interpret and promote vocational and technical education within the school and community.	4.41	6
16	Ex	Use demonstrations in the learning experiences.	4.36	8
5	P	Determine educational needs and goals of students.	4.27	9
17	Ex	Conduct field trips for learning experiences.	4.27	9

Ex = Execution
PHR = Public and Human Relations
Ev = Evaluation
P = Planning

TABLE VI

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY BUSINESS AND OFFICE TEACHERS

Item No.	Area	Competency	Average Rating	Rank
7	P	Select and develop instructional content for lessons, units and courses.	4.71	1
4	P	Identify competencies needed for students to possess to enable them to enter an occupational skill.	4.58	2
38	Ev	Evaluate one's own techniques and methods of teaching.	4.58	2
8	P	Develop a variety of methods and techniques of teaching.	4.54	4
53	G	Assist students in seeking employment.	4.54	4
31	Ev	Evaluate text and reference materials to meet course objectives.	4.50	6
32	Ev	Establish the evaluative criteria for lessons, units and courses.	4.50	6
39	Ev	Evaluate student's progress in class, home and laboratory assignments.	4.50	6
5	P	Determine educational needs and goals of students.	4.46	9
16	Ex	Use demonstrations in the learning experiences.	4.46	9
30	Ex	Properly maintain facilities and equipment.	4.46	9

P = Planning
Ev = Evaluation
G = Guidance
EX = Execution

that four items from each of the areas of planning and evaluation appear in the top ten percent. The items in the top ten percent from planning were "select and develop instructional content for lessons, units and courses," "identify competencies needed for students to possess to enable them to enter an occupational skill," "develop a variety of methods and techniques of teaching," and "determine educational needs and goals of students." The items from the area of evaluation rated in the top ten percent were "evaluate one's own techniques and methods of teaching," "evaluate text reference materials to meet course objectives," "establish the evaluative criteria for lessons, units and courses," and "evaluate student's progress in class, home and laboratory assignments."

In addition, two items from the area of execution were included in the top ten percent. These items were "use demonstrations in the learning experiences," and "properly maintain facilities and equipment." One item from the guidance area, "assist students in seeking employment," was rated in the top ten percent.

In Table VII the ranked top ten percent of competencies rated by distributive education teachers are shown. Of note is that five of the items in the top ten percent were from the public and human relations area indicating a close working relationship with students, parents and community. These items were "develop acceptable working relationships with students, staff and others connected with the school," "maintain liaison with community members and professional, service, fraternal, social and religious organizations," "interpret and promote vocational and technical education within the school and community," and "keep community and school informed of new developments

TABLE VII

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY DISTRIBUTIVE EDUCATION TEACHERS

Item No.	Area	Competency	Average Rating	Rank
67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.64	1
72	PHR	Maintain liaison with business and industry.	4.56	2
69	PHR	Maintain liaison with community members and professional, service, fraternal, social and religious organizations.	4.48	3
83	S	Secure approval from administration for establishing a student vocational organization.	4.48	3
66	PHR	Interpret and promote vocational and technical education within the school and community.	4.44	5
38	Ev	Evaluate one's own techniques and methods of teaching.	4.36	6
68	PHR	Keep community and school informed of new developments in vocational and technical education using a variety of methods and techniques.	4.36	6
81	PR	Practice professionalism with school personnel and others.	4.36	6
89	S	Coordinate student vocational organization activities with instructional activities.	4.36	6

PHR = Public and Human Relations
S = Student Vocational Organizations
Ev = Evaluation
PR = Professional Role

in vocational and technical education using a variety of methods and techniques." An item from the professional role area, number 81, "practice professionalism with school personnel and others," which is closely related to items in the public and human relations area, was included in the top ten percent.

Two items from the student vocational organization were in the top ten percent indicating that vocational clubs play an important part in the distributive education instructional program. These items were "secure approval from administration for establishing a student vocational organization" and "coordinate student vocational organization activities with instructional activities." One item from the evaluation area, "evaluate one's own techniques and methods of teaching," was included in the top ten percent.

The ranked top ten percent of competencies rated by health occupations teachers are listed in Table VIII. This table includes fourteen items due to tied ranks. Of the items included in this table, five each were from the areas of planning and evaluation. The items from the area of planning included "select and develop instructional content for lessons, units and courses," "develop a variety of methods and techniques of teaching," "identify competencies needed for students to possess to enable them to enter an occupational skill," "determine educational needs and goals of students," and "organize the sequence of learning tasks." The items from the evaluation area rated in the top ten percent by the health teachers were "evaluate one's own techniques and methods of teaching," "evaluate text and reference materials to meet course objectives," "establish criteria and methods for classroom or shop-laboratory performances," "establish the evaluative

TABLE VIII

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY HEALTH OCCUPATIONS TEACHERS

Item No.	Area	Competency	Average Rating	Rank
38	Ev	Evaluate one's own techniques and methods of teaching.	4.78	1
7	P	Select and develop instructional content for lessons, units and courses.	4.67	2
8	P	Develop a variety of methods and techniques of teaching.	4.61	3
28	Ex	Reinforce learning through positive reinforcement techniques.	4.61	3
31	Ev	Evaluate text and reference materials to meet course objectives.	4.56	5
25	Ex	Direct laboratory experiences.	4.50	6
34	Ev	Establish criteria and methods for classroom or shop-laboratory performances.	4.50	6
4	P	Identify competencies needed for students to possess to enable them to enter an occupational skill.	4.44	8
5	P	Determine educational needs and goals of students.	4.44	8
9	P	Organize the sequence of learning tasks.	4.44	8
27	Ex	Recognize, interpret and utilize student actions and behaviors (cues).	4.44	8
32	Ev	Establish the evaluative criteria for lessons, units and courses.	4.44	8
39	Ev	Evaluate student's progress in class, home and laboratory assignments.	4.44	8
77	PR	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technologoical advancements.	4.44	8

Ev = Evaluation
P = Planning
Ex = Execution
PR = Professional Role

criteria for lessons, units and courses," and "evaluate student's progress in class, home and laboratory assignments."

Three items from the execution area and one item from the professional role area were rated in the top ten percent. The items from the execution area were "reinforce learning through positive reinforcement techniques," "direct laboratory experiences," and "recognize, interpret and utilize student actions and behaviors, (cues)." The item from the professional role area in the top ten percent was "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements."

Data in Table IX show the ranked top ten percent of competencies rated by home economics teachers. They rated three items from the planning area in the top ten percent. These items were "select and develop instructional content for lessons, units and courses," "develop a variety of methods and techniques of teaching," and "determine and select tools and equipment necessary for learning experiences of students."

The home economics teachers rated two items from the professional role, "keep credentials up to date," and "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," in the top ten percent. They also rated two items from the public and human relations area, "develop acceptable working relationships with students, staff and others connected with the school," and "maintain good public relations with parents," in the top ten percent. In addition, they rated two items from the execution area, "recognize, interpret and utilize student actions and behaviors, (cues)," and "use demonstrations in the learning experiences,"

TABLE IX

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY HOME ECONOMICS TEACHERS

Item No.	Area	Competency	Average Rating	Rank
67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.62	1
7	P	Select and develop instructional content for lessons, units and courses.	4.54	2
78	PR	Keep credentials up to date.	4.54	2
8	P	Develop a variety of methods and techniques of teaching.	4.50	4
27	Ex	Recognize, interpret and utilize student actions behaviors (cues).	4.46	5
75	PHR	Maintain good public relations with parents.	4.46	5
77	PR	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.	4.46	5
10	P	Determine and select tools and equipment necessary for learning experiences of students.	4.38	8
16	Ex	Use demonstrations in the learning experiences.	4.38	8
40	Ev	Form a variety of testing methods, both objective and subjective.	4.38	8

PHR = Public and Human Relations
P = Planning
PR = Professional Role
Ex = Execution
Ev = Evaluation

in the top ten percent. They rated only one item from the evaluation area, "form a variety of testing methods, both objective and subjective," in the top ten percent.

Table X contains data indicating the ranked top ten percent of competencies rated by industrial arts teachers. It is interesting that the number one ranked item was from the execution area, "maintain and use safety rules and regulations." They also rated three other items from the execution area in the top ten percent. These items were "properly maintain facilities and equipment," "use demonstrations in the learning experiences," and "direct laboratory experiences."

The industrial arts teachers also rated two items from the public and human relations area, "develop acceptable working relationships with students, staff and others connected with the schools," and "maintain good public relations with parents," in the top ten percent.

One item from the evaluation area, "evaluate one's own techniques and methods of teaching," was rated in the top ten percent. Also, one item from the professional role area, "practice professionalism with school personnel and others," was included in the top ten percent by the industrial arts teachers. The one item they rated in the top ten percent from the planning area, "develop safety rules and regulations," was ranked two. This indicates a sincere concern by the teachers for the safety of students.

The ranked top ten percent of competencies rated by technical education teachers is given in Table XI. It was interesting that they gave item number seven, "select and develop instructional content for lessons, units and courses," from the planning area, the highest rating. In addition, they rated two other items from the planning area

TABLE X

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY INDUSTRIAL ARTS TEACHERS

Item No.	Area	Competency	Average Rating	Rank
26	Ex	Maintain and use safety rules and regulations.	4.56	1
13	P	Develop safety rules and regulations.	4.31	2
30	Ex	Properly maintain facilities and equipment.	4.31	2
16	Ex	Use demonstrations in the learning experiences.	4.19	4
67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.19	4
25	Ex	Direct laboratory experiences.	4.06	6
38	Ev	Evaluate one's own techniques and methods of teaching.	4.06	6
81	PR	Practice professionalism with school personnel and others.	4.06	6
75	PHR	Maintain good public relations with parents.	4.00	9

Ex = Execution
P = Planning
PHR = Public and Human Relations
Ev = Evaluation
PR = Professional Role

TABLE XI

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY TECHNICAL EDUCATION TEACHERS

Item No.	Area	Competency	Average Rating	Rank
7	P	Select and develop instructional content for lessons, units and courses.	4.67	1
38	Ev	Evaluate one's own techniques and methods of teaching.	4.47	2
4	P	Identify competencies needed for students to possess to enable them to enter an occupational skill.	4.33	3
77	PR	Acquire new occupational skills, knowledge and competencies to keep pace with technological advancements.	4.27	4
9	P	Organize the sequence of learning tasks.	4.20	5
25	Ex	Direct laboratory experiences.	4.20	5
40	Ev	Form a variety of testing methods, both objective and subjective.	4.20	5
16	Ex	Use demonstrations in the learning experiences.	4.13	8
32	Ev	Establish the evaluative criteria for lessons, units and courses.	4.13	8
56	M	Define the operating rules and responsibilities for the learner and the teacher.	4.13	8
81	PR	Practice professionalism with school personnel and others.	4.13	8

P = Planning
Ev = Evaluation
PR = Professional Role
Ex = Execution
M = Management

in the top ten percent. These items were "identify competencies needed for students to possess to enable them to enter an occupational skill," and "organize the sequence of learning tasks." In addition, they rated three items from the evaluation area in the top ten percent. These items were "evaluate one's own techniques and methods of teaching," "form a variety of testing methods, both objective and subjective," and "establish the evaluative criteria for lessons, units and courses." They rated two items each from the professional role and execution areas in the top ten percent. The items in the top ten percent from the professional role area were "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," and "practice professionalism with school personnel and others." The items rated in the top ten percent from the execution area were "direct laboratory experiences" and "use demonstrations in the learning experiences." One item from the management area in the top ten percent was "define the operating rules and responsibilities for the learner and teacher."

The ranked top ten percent of competencies rated by trade and industrial teachers is shown in Table XII. They rated three items from the public and human relations area in the top ten percent. These items were "develop acceptable working relationships with students, staff and others connected with the school," "maintain liaison with business and industry," and "interpret and promote vocational and technical education within the school and community." One item from guidance, "assist students in seeking employment," was rated in the top ten percent. They also rated two items from the area of execution, "maintain and use safety rules and regulations," and "use demonstrations

TABLE XII

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY TRADE AND INDUSTRY TEACHERS

Item No.	Area	Competency	Average Rating	Rank
26	Ex	Maintain and use safety rules and regulations.	4.52	1
38	Ev	Evaluate one's own techniques and methods of teaching.	4.48	2
77	PR	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.	4.48	2
67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.44	4
16	Ex	Use demonstrations in the learning experiences.	4.37	5
13	P	Develop safety rules and regulations.	4.33	6
53	G	Assist students in seeking employment.	4.33	6
72	PHR	Maintain liaison with business and industry.	4.30	8
66	PHR	Interpret and promote vocational and technical education within the school and community.	4.26	9
78	PR	Keep credentials up to date.	4.26	9

Ex = Execution
Ev = Evaluation
PR = Professional Role
PHR = Public and Human Relations
P = Planning
G = Guidance

in the learning experiences," in the top ten percent. In addition, they rated two items from the professional role area, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," and "keep credentials up to date," in the top ten percent. There was one item each from the areas of evaluation, guidance and planning in the top ten percent. The item from evaluation was "evaluate one's own techniques and methods of teaching." The item from planning was "develop safety rules and regulations," and the item from guidance was "assist students in seeking employment."

It is of further interest that seven teacher groups rated item number 38, "evaluate one's own techniques and methods of teaching," in the top ten percent. The group not rating it in the top ten percent was the home economics teachers, however, they did give the item a rating of 4.27.

Six teacher groups rated item number 16, "use demonstrations in the learning experiences," from the execution area in the top ten percent. Teachers of distributive education and health did not include the item in the top ten percent although they had given the item a high rating.

Item number 67, "develop acceptable working relationships with students, staff and others connected with the school," from the public and human relations area, was rated in the top ten percent by five teacher groups. The groups not rating it in the top ten percent were teachers of business and office, health, and technical education. Distributive education and home economics teacher groups ranked the item number one. Trade and industry rated the item in the top four percent.

Industrial arts and agriculture teachers rated it high enough to receive a rank of four.

Four teacher groups, business and office, health, home economics, and technical education rated item number 7, "select and develop instructional content for lessons, units and courses," from the planning area, in the top ten percent. Item 8, "develop a variety of methods and techniques of teaching," from the planning area, was rated in the top ten percent by teachers of agriculture, business and office, health, and home economics.

In addition, teachers of health, home economics, technical education and trade and industry rated item 77 "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements" in the top ten percent.

The three teacher groups of business and office, health, and technical education rated item 4 "identify competencies needed for students to possess to enable them to enter an occupational skill" in the top ten percent. In addition, teachers of agriculture, business and office, and health rated item 5 from the planning area, "determine educational needs and goals of students," in the top ten percent.

Teachers of agriculture, industrial arts and trade and industry rated item 26, "maintain and use safety rules and regulations," from the execution area in the top ten percent. Teachers of industrial arts and trade and industry rated it number one. In addition, item 25, "direct laboratory experiences," from the execution area, was rated in the top ten percent by teachers of health, industrial arts and technical education.

One item from the evaluation area, "establish the evaluative criteria for lessons, units and courses," was rated in the top ten percent by teachers of business and office, health, and technical education. Only one item from the professional role area, "practice professionalism with school personnel and others," was rated in the top ten percent by three teacher groups. Those groups were distributive education, industrial arts and technical education.

Item 66, "intepret and promote vocational and technical education within the school and community," from the public and human relations area, was rated in the top ten percent by teachers of agriculture, distributive education and trade and industry. Item 75, "maintain good public relations with parents," also from the public and human relations area, was rated in the top ten percent by teacher groups of agriculture, home economics and industrial arts.

Item 9, "organize the sequence of learning tasks," from the planning area, was rated in the top ten percent by teachers of health occupations and technical education. Another item from the planning area, item 13, "develop safety rules and regulations," was rated in the top ten percent by industrial arts and trade and industry teachers.

An item from the execution area, number 27, "recognize, interpret and utilize student actions and behaviors (cues), was rated in the top ten percent by health and home economics teachers. Another item from the execution area, item 30, "properly maintain facilities and equipment," was rated in the top ten percent by teachers of business and office and industrial arts.

Teacher groups of business and office and health rated items 31, "evaluate text and reference materials to meet course objectives,"

and 39, "evaluate students progress in class, home and laboratory," from the evaluation area, in the top ten percent. In addition, home economics and technical education teachers rated item 40, "form a variety of testing methods, both objective and subjective," from the evaluation area, in the top ten percent.

One item from the guidance area, item 53, "assist students in seeking employment," was rated in the top ten percent by teachers of business and office and trade and industry. One item from the public and human relations area, number 72, "maintain liaison with business and industry," was rated in the top ten percent by teachers of distributive education and trade and industry.

Home economics and trade and industry teacher groups rated item 78, "keep credentials up to date," from the professional role area, in the top ten percent. Home economics teachers were the only group that rated item 10, "determine and select tools and equipment necessary for learning experiences of students," from the planning area, in the top ten percent.

Teachers of agriculture were the only group rating item 17, "conduct field trips for learning experiences" and item 20, "conduct home visits," from the execution area, in the top ten percent.

Health teachers were the only group rating item 28, "reinforce learning through positive reinforcement techniques," from the execution area, in the top ten percent. In addition, health teachers were the only group to rate item 34, "establish criteria and methods for classroom or shop-laboratory performances," from the evaluation area, in the top ten percent.

One item from management, number 56, "define the operating rules and responsibilities of the learner and teacher," was rated in the top ten percent by only one teacher group, that of technical education.

Distributive education teachers rated item 68, "keep community and school informed of new developments in vocational and technical education using a variety of methods and techniques," and 69, "maintain liaison with community members and professional, service, fraternal, social and religious organizations," from the public and human relations area, in the top ten percent. In addition, they rated items 83, "secure approval from administration for establishing a student vocational organization" and 89, "coordinate student vocational organization activities with instructional activities." from the student vocational organization area in the top ten percent.

None of the teacher groups ranked any of the three items listed in the general school activities area in the top ten percent.

Analysis of Student Data

The first step in analyzing the student data consisted of selecting the common competencies as determined by the established criterion. Based on the criterion that competencies were important if rated 2.50 or higher by any group, it was determined that 88 or 95.6 percent of the 92 items rated met the criterion. (See Appendix E for mean responses of competencies by student groups.) These 88 competencies comprise a core of competencies common to all student groups. These competencies are presented in Table XIII.

It was interesting to note that 33 (37.5 percent) of the 88 items determined to be common competencies to the student groups were rated

TABLE XIII

THE COMMON, IMPORTANT AND VERY IMPORTANT COMPETENCIES AS IDENTIFIED BY ALL STUDENT GROUPS

Item Number	Competency
	The Teacher Will:
	PLANNING:
1.	Organize and utilize an advisory council in planning course content.
2.	Use the advisory council in keeping abreast of new developments in vocational and technical education.
3.	Identify from an occupational or task analysis the skills and information to be taught for an appropriate occupation.
**4.	Identify competencies needed for students to possess to enable them to enter an occupational skill.
**5.	Determine educational needs and goals of students.
6.	Form objectives of the vocational and technical education program.
7.	Select and develop instructional content for lessons, units, and courses.
**8.	Develop a variety of methods and techniques of teaching.
9.	Organize the sequence of learning tasks.
**10.	Determine and select tools and equipment necessary for the learning experiences of students.
**11.	Determine and select the instructional media and aids for student learning experiences.
12.	Develop procedures for working with disadvantaged students.
13.	Develop safety rules and regulations.
	EXECUTION:
14.	Direct group discussions.
15.	Moderate panel discussions.
**16.	Use demonstrations in the learning experiences.
17.	Conduct field trips for learning experiences.
18.	Direct role playing.
19.	Present lectures.
21.	Identify, select and use resource persons to present information.
*22.	Use a multiple of audiovisuals.

*Rated very important (3.50 or higher) by all student groups.

**Rated very important (3.50 or higher) by all student and teacher groups.

TABLE XIII (CONTINUED)

Item Number	Competency
23.	Set up displays to present occupational information.
24.	Direct programmed instruction (teaching machine or text).
**25.	Direct laboratory experiences.
**26.	Maintain and use safety rules and regulations.
**27.	Recognize, interpret and utilize student actions and behaviors (cues).
**28.	Reinforce learning through positive reinforcement techniques.
29.	Reproduce instructional materials using various reproduction equipment.
**30.	Properly maintain facilities and equipment.
EVALUATION:	
**31.	Evaluate text and reference materials to meet course objectives.
32.	Establish the evaluative criteria for lessons, units, and courses.
33.	Determine if evaluative criteria exist and select measures appropriate to the evaluative criteria.
**34.	Establish criteria and methods for classroom or shop-laboratory performances.
35.	Establish criteria for student self-evaluation.
36.	Direct student self-evaluation.
37.	Interpret evaluation data for students and parents.
**38.	Evaluate one's own techniques and methods of teaching.
**39.	Evaluate student's progress in class, home and laboratory assignments.
*40.	Form a variety of testing methods, both objective and subjective.
**41.	Evaluate classroom facilities and equipment.
GUIDANCE:	
42.	Interview students and parents.
43.	Evaluate all data about students for selective purposes.
44.	Assemble and display occupational information.
46.	Present related occupational information.
47.	Provide students with resource materials on occupational opportunities.

*Rated very important (3.50 or higher) by all student groups.

**Rated very important (3.50 or higher) by all student and teacher groups.

TABLE XIII (CONTINUED)

Item Number	Competency
48.	Refer students to guidance counselors or other qualified personnel for occupational and educational information.
50.	Assist students with personal and social problems.
51.	Assist students with scholastic problems.
52.	Establish an open door counseling policy.
53.	Assist students in seeking employment.
54.	Collect and disseminate student follow-up data.
55.	Utilize follow-up data to up-date, improve and revise the curriculum.
MANAGEMENT:	
56.	Define the operating rules and responsibilities of the learner and teacher.
**57.	Determine short and long range supply, equipment and facility needs.
58.	Consult the advisory council in planning facilities, equipment and supply needs.
59.	Maintain a running inventory of supplies and equipment.
60.	Develop and implement a policy for use of facilities, equipment and supplies.
61.	Record and file cumulative student progress data.
62.	Develop and maintain placement and follow-up data.
63.	Develop and maintain occupational opportunities files.
65.	Conduct student learning activities to achieve established goals, needs and objectives.
PUBLIC AND HUMAN RELATIONS:	
**66.	Interpret and promote vocational and technical education within the school and community.
**67.	Develop acceptable working relationships with students, staff and others connected with the school.
*68.	Keep community and school informed of new developments in vocational and technical education using a variety of methods and techniques.
*69.	Maintain liaison with community members and professional, service, fraternal, social and religious organizations.
*70.	Serve as a resource person to the community agencies and organizations.

*Rated very important (3.50 or higher) by all student groups.

**Rated very important (3.50 or higher) by all student and teacher groups.

TABLE XIII (CONTINUED)

Item Number	Competency
71.	Maintain liaison with employment agencies.
*72.	Maintain liaison with business and industry.
73.	Consult the advisory council periodically to get their expectations of the vocational and technical program.
74.	Serve in community, civic, service or social organizations to improve the image of vocational and technical programs.
*75.	Maintain good public relations with parents.
PROFESSIONAL ROLE:	
**76.	Plan a personal continuing educational program.
**77.	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.
**78.	Keep credentials up to date.
**79.	Support professional organizations through membership and active participation.
*80.	Attempt to improve the image of vocational and technical education programs through active membership in professional organizations.
**81.	Practice professionalism with school personnel and others.
82.	Participate in and/or plan an in-service education program.
STUDENT VOCATIONAL ORGANIZATIONS:	
83.	Secure approval from administration for establishing a student vocational organization.
84.	Organize and promote school and community support for a student vocational organization.
*85.	Help students plan a meeting for and organize a student vocational organization.
86.	Help establish and assist in conducting a program of work for a student vocational organization.
87.	Conduct leadership development seminar for student vocational organization members.
88.	Encourage affiliation of the student organization with state and national activities.
89.	Coordinate student vocational organization activities with instructional activities.

*Rated very important (3.50 or higher) by all student groups.

**Rated very important (3.50 or higher) by all student and teacher groups.

TALBE XIII (CONTINUED)

Item Number	Competency
GENERAL SCHOOL ACTIVITIES:	
90.	Participate in non-instructional school duties, i.e, PTA, chaperoning.
91.	Sponsor non-vocational clubs, societies and special interest groups.
92.	Supervise student teaching and cooperate with colleges and universities in providing learning experiences for student teachers.

*Rated very important (3.50 or higher) by all student groups.

**Rated very important (3.50 or higher) by all student and teacher groups.

very important (3.50 or higher) by all student groups. These items have an asterisk preceding them as shown in Table XIII. It was also noted that 24 of the 33 competencies were rated very important by all teacher groups. These 24 items as shown in Table XIII are marked with two asterisks preceding the item number.

All student groups rated six of the seven items in the professional role area as being very important. They rated planning a personal continuing educational program and keeping credentials up to date as being very important. They also said acquiring new occupational skills, knowledge and competencies necessary to keep pace with technological advancements was very important. In addition they rated supporting professional organizations through membership and active participation as well as practicing professionalism with school personnel and others as being very important. An additional item they rated very important was the attempting to improve the image of vocational and technical education programs through active membership in professional organizations. The only item from the professional role area they did not rate as very important was the item, "participate in and/or plan an in-service education program."

They considered seven of the ten items in the public and human relations area as being very important. All student groups rated interpreting and promoting vocational and technical education within the school and community and keeping the community and school informed of new developments in vocational and technical education using a variety of methods and techniques as being very important. In connection with these concerns they considered serving as a resource person to the community agencies and organizations as being very important.

They also considered maintaining liaison with community members and professional, service, fraternal, social and religious organizations and business and industry as being very important. One additional item considered very important by all students was the maintaining of good public relations with parents. The three items not considered very important were "maintain liaison with employment agencies," "consult with the advisory council periodically to get their expectations of the vocational and technical program," and "serve in community, civic, service or social organizations."

Seven of the sixteen common items in the execution area were considered very important by all student groups. Of those items related directly to instructional methods, demonstrations, use of audiovisuals, laboratory experiences, use of cues and reinforcement of learning through positive reinforcement techniques were considered very important. They also considered the proper maintenance of facilities and equipment and maintaining and using safety rules and regulations as being very important. The data in Table II revealed that all teacher groups had rated the same items in the execution area as very important as had the student groups, with the exception of the using of a multiple of audiovisuals.

All student groups considered six of the eleven items in the evaluation area as being important. They considered evaluation of text and reference materials to meet course objectives, as well as evaluation of classroom facilities and equipment, as being very important. In addition, they considered evaluation of students' progress in class, home and laboratory assignments as being very important. They also rated establishing criteria and methods for classroom or

shop-laboratory performances as being very important. Of interest was that they considered the forming of a variety of testing methods, both objective and subjective, as being very important. All student groups rated evaluating one's own techniques and methods of teaching as being very important.

Five items from the planning area were considered very important by all student groups. They considered identifying competencies needed for students to possess to enable them to enter an occupational skill as being very important. They additionally considered determining educational needs and goals of students; determining and selecting tools and equipment necessary for the learning experiences of students; and determining and selecting instructional media and aids for student learning experiences as being very important. The student groups judged developing a variety of methods and techniques of teaching as being very important.

Only one of the nine items in the management area was considered very important by all student groups. They considered determining the short and long range supply, equipment and facility needs as being very important. The only item they considered as very important of the seven items in the student vocational organization area was helping students plan a meeting for and organize a student vocational organization.

None of the twelve common items in the guidance area nor any of the three items in the general school activities area were rated very important by all student groups.

The data presented in Table XIV includes the number of items in each competency area, the number of items rated important or higher

TABLE XIV

NUMBER OF ITEMS IN EACH COMPETENCY AREA COMPARED WITH THE NUMBER OF ITEMS RATED IMPORTANT OR HIGHER BY STUDENT GROUP AND NUMBER OF ITEMS COMMON TO ALL STUDENT GROUPS

Competency Area	Number of Items in Competency Area	Number of Items Rated Important or Higher by Student Group							No. of Items Common to all Student Groups
		Argi.	B & O	DE	Home Ec.	IA	Tec. Ed.	T & I	
Planning	13	13	13	13	13	13	13	13	13
Execution	17	17	17	17	17	16	16	16	16
Evaluation	11	11	11	11	11	11	11	11	11
Guidance	14	14	14	14	13	13	12	13	12
Management	10	10	10	10	9	10	9	9	9
Public and Human Relations	10	10	10	10	10	10	10	10	10
Professional Role	7	7	7	7	7	7	7	7	7
Student Vocational Organizations	7	7	7	7	7	7	7	7	7
General School Activities	3	3	3	3	3	3	3	3	3
Totals	92	92	92	92	90	90	88	89	88
Percent	100	100	100	100	97.8	97.8	95.6	96.7	95.6

by each student group and the number of items common to all student groups.

Of particular interest is that students of agriculture, business and office and distributive education rated all items important or higher. Of further interest is that students of home economics and industrial arts considered 90 (97.8 percent) of the 92 items rated as being important or higher. Trade and industry students rated 89 (96.7 percent) of the competencies important or higher. In addition, teachers of technical education rated 88 (95.6 percent) of the competencies important or higher.

Some interesting statistics about those competencies not common to all student disciplines are presented in Table XV. Responses to items in the table revealed that only four of the 92 items rated by the student groups did not meet the criterion and were, therefore, considered not common to all student groups.

Students of industrial arts, technical education and trade and industry rated item number 20, "conduct home visits," as being of little or no importance. Students of business and office rated the item 2.59. Students of distributive education and home economics rated the item 3.29. Students of agriculture considered this item very important as indicated by a 4.38 rating.

Students of home economics and technical education rated item number 44, "select and assign students for the program," as being of little or no importance. Students of agriculture, business and office, industrial arts and trade and industry considered the item important as indicated by respective ratings of 3.23, 3.28, 2.63 and 2.67.

TABLE XV

COMPETENCIES NOT COMMON TO ALL STUDENT DISCIPLINES

Competency Area	Item No.	Competency	Group Responding	Mean Response
Execution	20.	Conduct home visits	Agri.	4.38
			B & O	2.59
			DE	3.29
			Home Ec.	3.29
			Ind. Arts	2.05
			Tec. Ed.	1.59
			T & I	2.00
Guidance	44.	Select and assign students for program	Agri.	3.23
			B & O	3.28
			DE	4.36
			Home Ec.	2.40
			Ind. Arts	2.63
			Tec. Ed.	2.45
			T & I	2.67
	49.	Conduct visits to students' homes regarding student educational development	Agri.	3.59
			B & O	2.76
			DE	3.50
			Home Ec.	3.14
			Ind. Arts	2.11
			Tec. Ed.	1.95
			T & I	2.11
Management	64.	Group students according to individual differences	Agri.	3.13
			B & O	2.90
			DE	3.57
			Home Ec.	2.37
			Ind. Arts	2.79
			Tec. Ed.	2.18
			T & I	2.11

Distributive education students considered the item very important as indicated by a rating of 4.36.

Students of industrial arts, technical education and trade and industry rated item 49, "conduct home visits to students homes regarding student educational development," as being of little or no importance. Students of business and office and home economics rated the item important with respective ratings of 2.76 and 3.14. Students of agriculture and distributive education considered the item very important as indicated by respective ratings of 3.59 and 3.50.

Students of home economics, technical education and trade and industry rated item number 64, "group students according to individual differences," as being of little or no importance. Students of agriculture, business and office and industrial arts considered the item important with respective ratings of 3.13, 2.90 and 2.79. Students of distributive education considered the item very important and rated it 3.57.

The ranked top ten percent of competencies rated by the student groups is presented in Tables XVI through XXII. Some tables include more than ten percent of the competencies due to tied ranks.

The ranked top ten percent of competencies rated by agriculture students is presented in Table XVI. Only one item from the area of planning, item 13, "develop safety rules and regulations," was included in the top ten percent; however, it was rated the highest. Of interest is that five items in the top ten percent were from the execution area. The agriculture students rated "maintain and use safety rules and regulations" and "properly maintain facilities and equipment" in the top ten percent. The items, "conduct home visits" and "reinforce

TABLE XVI

RANKED TOP TEN PERCENT OF COMPETENCIES
RATED BY AGRICULTURE STUDENTS

Item No.	Area	Competency	Average Rating	Rank
13	P	Develop safety rules and regulations.	4.64	1
26	Ex	Maintain and use safety rules and regulations.	4.59	2
30	Ex	Properly maintain facilities and equipment.	4.46	3
75	PR	Maintain good public relations with parents.	4.44	4
20	Ex	Conduct home visits.	4.38	5
39	Ev	Evaluate students' progress in class, home and laboratory assignments.	4.23	6
84	S	Organize and promote school and community support for a student vocational organization.	4.23	6
16	Ex	Use demonstrations in the learning experiences.	4.15	8
28	Ex	Reinforce learning through positive reinforcement techniques.	4.15	8

P = Planning
Ex = Execution
PR = Professional Role
Ev = Evaluation
S = Student Vocational Organizations

learning through positive reinforcement techniques," were included in the top ten percent. They also rated the "use of demonstrations in the learning experiences" in the top ten percent.

The agriculture students rated "maintain good public relations with parents," from the professional role area, in the top ten percent. In addition, one item from the student vocational organization area, "organize and promote school and community support for a student vocational organization," was included in the top ten percent. Also one item from the evaluation area, "evaluate student's progress in class, home and laboratory assignments," was included in the top ten percent.

The ranked top ten percent of competencies rated by students of business and office is presented in Table XVII. It was interesting to note that the two top rated items were from the execution area. These items were "use demonstrations in the learning experiences" and "reinforce learning through positive reinforcement techniques." They also rated two items from the planning area, "develop a variety of methods and techniques of teaching" and "select and develop instructional content for lessons, units and courses," in the top ten percent. Two items from the area of professional role, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements" and "keep credentials up to date" were rated in the top ten percent by business and office students. Of interest was that the business and office students rated two items from the evaluation area, "evaluate one's own techniques and methods of teaching" and "evaluate students' progress in class, home and laboratory assignments," in the top ten percent. One item from the public and

TABLE XVII

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY BUSINESS AND OFFICE STUDENTS

Item No.	Area	Competency	Average Rating	Rank
16	Ex	Use demonstrations in learning experience.	4.72	1
28	Ex	Reinforce learning through positive reinforcement techniques.	4.59	2
8	P	Develop a variety of methods and techniques of teaching.	4.52	3
38	Ev	Evaluate one's own techniques and methods of teaching.	4.52	3
77	PR	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.	4.48	5
78	PR	Keep credentials up to date.	4.48	5
7	P	Select and develop instructional content for lessons, units and courses.	4.41	7
67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.41	7
39	EV	Evaluate students' progress in class, home and laboratory assignments.	4.38	9

Ex = Execution
P = Planning
Ev = Evaluation
PR = Professional Role
PHR = Public and Human Relations

human relations area, "develop acceptable working relationships with students, staff and others connected with the school," was rated in the top ten percent.

The ranked top ten percent of competencies rated by distributive education students is presented in Table XVIII. Of interest was that three of the top four rated items were from the public and human relations area. The items were "maintain liaison with community members and professional, service, fraternal, social and religious organizations," "maintain liaison with business and industry" and "develop acceptable working relationships with students, staff and others connected with the school." It was also revealed in the table that teachers of distributive education considered items from the public and human relations area as being of very high concern.

The distributive education students rated two items from the evaluation area in the top ten percent. These were "establish evaluative criteria for lessons, units and courses" and "evaluate one's own techniques and methods of teaching." They also rated one item from the execution area, "use demonstrations in the learning experiences," in the top ten percent. In addition, they rated one item from each of the areas of guidance, management and student vocational organizations in the top ten percent. The item from guidance was "select and assign students for the program." The item from the management area was "conduct student learning activities to achieve established goals, needs and objectives." The item from student vocational organizations was "secure approval from administration for establishing a student vocational organization."

TABLE XVIII

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY DISTRIBUTIVE EDUCATION STUDENTS

Item No.	Area	Competency	Average Rating	Rank
69	PHR	Maintain liaison with community members and professional, service, fraternal, social and religious organizations.	4.64	1
72	PHR	Maintain liaison with business and industry.	4.50	2
16	Ex	Use demonstrations in the learning experiences.	4.43	3
67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.43	3
44	G	Select and assign students for the program.	4.36	5
65	M	Conduct student learning activities to achieve established goals, needs and objectives.	4.36	5
83	S	Secure approval from administration for establishing a student vocational organization.	4.36	5
32	Ev	Establish the evaluative criteria for lessons, units and courses.	4.29	8
38	Ev	Evaluate one's own techniques and methods of teaching.	4.29	8

PHR = Public and Human Relations
Ex = Execution
G = Guidance
M = Management
S = Student Vocational Organizations
Ev = Evaluation

Student data listing the ranked top ten percent of competencies rated by home economics students are presented in Table XIX. Home economics students rated one item from planning, "develop a variety of methods and techniques of teaching," the highest of the top ten percent. They rated three items from the area of execution in the top ten percent. These items were: reinforce learning through positive reinforcement techniques; use demonstrations in the learning experiences; and identify, select and use resource persons to present information. Two items from the public and human relations area, "develop acceptable working relationship with students, staff and others connected with the school" and "maintain good public relations with parents," were rated in the top ten percent. They also rated two items from the evaluation area, "evaluate one's own techniques and methods of teaching" and "form a variety of testing methods, both objective and subjective," in the top ten percent. They also rated an item from the professional role area, "keep credentials up to date" in the top ten percent.

The ranked top ten percent of competencies rated by industrial arts students is presented in Table XX. Of interest is that the items "develop safety rules and regulations" from the planning area and "maintain and use safety rules and regulations" from the execution area were rated the highest of the top ten percent. Three additional items from the execution area were rated in the top ten percent. These were: properly maintain facilities and equipment, use demonstrations in the learning experiences, and reinforce learning through positive reinforcement techniques. One other item from the planning area was rated in the top ten percent, that being "determine educational needs and goals of students."

TABLE XIX

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY HOME ECONOMICS STUDENTS

Item No.	Area	Competency	Average Rating	Rank
8	P	Develop a variety of methods and techniques of teaching.	4.74	1
28	Ex	Reinforce learning through positive reinforcement techniques.	4.63	2
38	Ev	Evaluate one's own techniques and methods of teaching.	4.63	2
40	Ev	Form a variety of testing methods, both objective and subjective.	4.51	4
67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.51	4
16	Ex	Use demonstrations in the learning experiences.	4.49	6
21	Ex	Identify, select and use resource persons to present information.	4.49	6
75	PHR	Maintain good public relations with parents.	4.46	8
78	PR	Keep credentials up to date.	4.46	8

P = Planning
Ex = Execution
Ev = Evaluation
PHR = Public and Human Relations
PR = Professional Role

TABLE XX

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY INDUSTRIAL ARTS STUDENTS

Item No.	Area	Competency	Average Rating	Rank
13	P	Develop safety rules and regulations.	4.63	1
26	Ex	Maintain and use safety rules and regulations.	4.63	1
38	Ev	Evaluate one's own techniques and methods of teaching.	4.53	3
16	Ex	Use demonstrations in the learning experiences.	4.42	4
30	Ex	Properly maintain facilities and equipment.	4.42	4
67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.37	6
5	P	Determine educational needs and goals of students.	4.21	7
28	Ex	Reinforce learning through positive reinforcement techniques.	4.21	7
77	RP	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.	4.21	7

P = Planning
Ex = Execution
Ev = Evaluation
PHR = Public and Human Relations
PR = Professional Role

The industrial arts students rated one item from the public and human relations area, "develop acceptable working relationships with students, staff and others connected with the school," in the top ten percent. In addition, one item from the professional role area, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," was rated in the top ten percent. They also rated one item from evaluation, "evaluate one's own techniques and methods of teaching," in the top ten percent.

Data presented in Table XXI includes the ranked top ten percent of competencies rated by technical education students. Of interest was that an item from the professional role area, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," was rated the highest. Two items from the evaluation area, "evaluate text and reference materials to meet course objectives" and "evaluate one's own techniques and methods of teaching," were included in the top ten percent.

Of much interest was that two items from the guidance area, "assist students in seeking employment" and "utilize follow-up data to up-date, improve and revise the curriculum," were rated in the top ten percent by the technical education students. Technical education students also rated two items from the public and human relations area in the top ten percent. These items were "maintain liaison with business and industry" and "develop acceptable working relationships with students, staff and others connected with the school." They further rated one item from planning, "identify competencies needed for students to possess to enable them to enter an occupational skill," in the top ten

TABLE XXI

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY TECHNICAL EDUCATION STUDENTS

Item No.	Area	Competency	Average Rating	Rank
77	PR	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.	4.32	1
31	Ev	Evaluate text and reference materials to meet course objectives.	4.27	2
38	Ev	Evaluate one's own techniques and methods of teaching.	4.23	3
72	PHR	Maintain liaison with business and industry.	4.23	3
53	G	Assist students in seeking employment.	4.14	5
55	G	Utilize follow-up data to up-date, improve and revise the curriculum.	4.14	5
25	Ex	Direct laboratory experiences.	4.09	7
4	P	Identify competencies needed for students to possess to enable them to enter an occupational skill.	4.05	8
67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.05	8

PR = Professional Role
Ev = Evaluation
PHR = Public and Human Relations
G = Guidance
Ex = Execution
P = Planning

percent. One item from the execution area, "direct laboratory experiences," was rated in the top ten percent.

The ranked top ten percent of competencies rated by trade and industry students is presented in Table XXII. Of interest is that they rated two items from the area of execution, "maintain and use safety rules and regulations" and "properly maintain facilities and equipment," the highest of the top ten percent. Also of interest was that they rated four items from the planning area in the top ten percent. These items were "identify from an occupational or task analysis the skills and information to be taught for an appropriate occupation," "identify competencies needed for students to possess to enable them to enter an occupational skill," "determine and select tools and equipment necessary for the learning experiences of students" and "develop safety rules and regulations."

In addition, trade and industry students rated two items from the evaluation area, "evaluate text and reference materials to meet course objectives" and "evaluate classroom facilities and equipment," in the top ten percent. They rated three items from the professional role area, "keep credentials up to date," "practice professionalism with school personnel and others" and "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," in the top ten percent. One item from the management area, "determine short and long range supply, equipment and facility needs," was included in the top ten percent.

Further analysis of the data revealed that five of the seven student groups rated item 16, "use demonstrations in the learning experiences," from the execution area, in the top ten percent. The

TABLE XXII

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY TRADE AND INDUSTRY STUDENTS

Item No.	Area	Competency	Average Rating	Rank
26	Ex	Maintain and use safety rules and regulations.	4.67	1
30	Ex	Properly maintain facilities and equipment.	4.67	1
3	P	Identify from an occupational or task analysis the skills and information to be taught for an appropriate occupation.	4.56	3
4	P	Identify competencies needed for students to possess to enable them to enter an occupational skill.	4.56	3
10	P	Determine and select tools and equipment necessary for the learning experiences of students.	4.56	3
78	PR	Keep credentials up to date.	4.56	3
13	P	Develop safety rules and regulations.	4.44	7
31	Ev	Evaluate text and reference materials to meet course objectives.	4.44	7
41	Ev	Evaluate classroom facilities and equipment.	4.44	7
57	M	Determine short and long range supply, equipment and facility needs.	4.44	7
77	PR	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.	4.44	7
81	PR	Practice professionalism with school personnel and others.	4.44	7

Ex = Execution
P = Planning
PR = Professional Role
Ev = Evaluation
M = Management

two groups not rating the item in the top ten percent were technical education and trade and industry students. This may not be significant as far as trade and industry students are concerned because their lowest rating of any item in the top ten percent was 4.44 which compares quite favorably with the mean ratings of other groups.

All student groups but agriculture and trade and industry rated items 38, "evaluate one's own techniques and methods of teaching," from the evaluation area, and 67, "develop acceptable working relationships with students, staff and others connected with the school," from the public and human relations area, in the top ten percent.

Four student groups rated item 28, "reinforce learning through positive reinforcement techniques," from the execution area, in the top ten percent. These groups were students of agriculture, business and office, home economics and industrial arts. There were also four groups rating item 77, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," from the professional role area, in the top ten percent. These groups were students of business and office, industrial arts, technical education and trade and industry.

Student groups of agriculture, industrial arts and trade and industry rated items 13, "develop safety rules and regulations," from the planning area, and 26, "maintain and use safety rules and regulations," from the execution area, in the top ten percent. Students of agriculture rated item 13 the highest while industrial arts students rated it in the top two percent. Agriculture, industrial arts and trade and industry students also rated item 30, "properly maintain facilities and equipment," from the execution area, in the top ten percent.

The three groups rating item 78, "keep credentials up to date," from the professional role area, in the top ten percent were business and office, home economics and trade and industry.

Item 8, "develop a variety of methods and techniques of teaching," from the planning area, was rated in the top ten percent by business and office and home economics students. The rating by the home economics students allowed the item to be ranked number one. Another item, number 4, "identify competencies needed for students to possess to enter an occupational skill," was rated in the top ten percent by students of technical education and trade and industry.

The student groups of agriculture and business and office rated item 39, "evaluate students' progress in class, home and laboratory assignments," from the evaluation area, in the top ten percent. In addition, agriculture and home economics students rated item 75, "maintain good public relations with parents," from the public and human relations area, in the top ten percent.

The technical education and trade and industry student groups rated item 31, "evaluate text and reference materials to meet course objectives," from the evaluation area, in the top ten percent. Another item, number 72 from the public and human relations area, "maintain liaison with business and industry," was rated in the top ten percent of distributive education and technical education student groups.

Only one student group, trade and industry, rated item 3, "identify from an occupational or task analysis the skills and information to be taught an appropriate occupation," in the top ten percent. The only student group to rate item 5, "determine educational needs and goals of students," from the planning area, in the top ten percent was

industrial arts students. In addition, trade and industry students represented the only group to rate item 10, "determine and select tools and equipment necessary for learning experiences of students," from the planning area, in the top ten percent. They were also the only student group to rate items 41, "evaluate classroom facilities and equipment," from the evaluation area and 81, "practice professionalism with school personnel and others," from the professional role area, in the top ten percent.

Business and office students were the only group which rated item 7, "select and develop instructional content for lessons, units and courses," in the top ten percent. Students of agriculture were the only group to rate item 20, "conduct home visits," from the execution area, in the top ten percent. They were also the only group to rate item 84, "organize and promote school and community support for a student vocational organization," from the student vocational organization area, in the top ten percent.

The only group to rate item 21 from the execution area, "identify, select and use resource persons to present information," in the top ten percent was the home economics group. They were also the only group to rate item 40, "form a variety of testing methods, both objective and subjective," from the evaluation area, in the top ten percent. Technical education students comprised the only group rating item 25, "direct laboratory experiences," from the execution area, in the top ten percent.

Distributive education students rated item 32, "establish evaluation criteria for lessons, units and courses," from the evaluation area, in the top ten percent. In addition, distributive education students rated

item 65, "conduct student learning activities to achieve established goals, needs and objectives," from the management area, in the top ten percent. Of interest was that they were the only group to rate item 69, "maintain liaison with community members, professional, service, fraternal, social, and religious organizations," from the public and human relations area, in the top ten percent. They also rated item 83, "secure approval from administration for establishing a student vocational organization," from the student vocational organization area, in the top ten percent.

The ranked top ten percent of competencies rated by all students and all teachers is shown in Table XXIII. An overview of the table allows one to see that students and teachers rated six of the same competencies in the top ten percent. Item 38 from the evaluation area, "evaluate one's own techniques and methods of teaching," was rated the highest by both teachers and students and was ranked number one. Items 77 and 78 from the professional role area, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements" and "keep credentials up to date," were rated in the top ten percent by teachers and students.

Both groups rated item 67 from the public and human relations area, "develop acceptable working relationships with students, staff and others connected with the school," in the top ten percent. In addition, they rated item 8 from the planning area, "develop a variety of methods and techniques of teaching," in the top ten percent. One item from the execution area, "use of demonstrations in the learning experiences," was rated in the top ten percent by both groups.

TABLE XXIII

RANKED TOP TEN PERCENT OF COMPETENCIES RATED BY ALL STUDENTS AND ALL TEACHERS

Students					Teachers				
Item No.	Area	Competency	Mean Response	Rank	Item No.	Area	Competency	Mean Response	Rank
*38	Ev	Evaluate one's own techniques and methods of teaching.	4.37	1	*38	Ev	Evaluate one's own techniques and methods of teaching.	4.43	1
*16	Ex	Use demonstrations in the learning experiences.	4.36	2	*67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.41	2
28	Ex	Reinforce learning through positive reinforcement techniques.	4.31	3	7	P	Select and develop instructional content for lessons, units and courses.	4.36	3
*67	PHR	Develop acceptable working relationships with students, staff and others connected with the school.	4.31	3	*16	Ex	Use demonstrations in the learning experiences.	4.34	4
*78	PR	Keep credentials up to date.	4.25	5	*8	P	Develop a variety of methods and techniques of teaching.	4.32	5
*8	P	Develop a variety of methods and techniques of teaching.	4.22	6	*78	PR	Keep credentials up to date.	4.27	6

*77	PR	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.	4.22	6	*77	PR	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.	4.26	7
30	Ex	Properly maintain facilities and equipment.	4.20	8	81	PR	Practice professionalism with school personnel and others.	4.26	7
75	PHR	Maintain good public relations with parents.	4.20	8	5	P	Determine educational needs and goals of students.	4.21	8

*Rated in the top ten percent by both groups

Ev = Evaluation
Ex = Execution
PHR = Public and Human Relations
P = Planning
PR = Professional Role

Other items rated in the top ten percent by students that were not rated in the top ten percent by the teachers were items 28 and 30 from the execution area, "reinforce learning through positive reinforcement techniques" and "properly maintain facilities and equipment." Another item rated in the top ten percent by students but not rated in the top ten percent by teachers was item 75 from the public and human relations area, "maintain good public relations with parents."

Items rated in the top ten percent by teachers but not by students were items 5 and 7 from the planning area, "determine educational needs and goals of students" and "select and develop instructional content for lessons, units and courses." The teachers rated one other item not shared with the students in the top ten percent, that being item 81 from the professional role area, "practice professionalism with school personnel and others."

Analysis of Total Group Data

This section was addressed to achieving objective four of this study, which was to determine how the ratings of the competencies by the groups compared. In order to achieve this objective and also to allow what was believed to be valuable information to be shown, the writer developed Table XXIV. The table includes the item number, competencies by area and the mean responses to each item by group. The table also includes a composite mean for each item. The items rated 3.50 or higher by all groups are identified with either one or two asterisks. Those items rated 4.00 or more are identified with two asterisks. Any item rated 3.50 or more was considered to be a very

TABLE XXIV

MEAN RESPONSES BY GROUP

Item No.	Competencies	Adm. n=98		Advisory Council n=25		PPDC n=22		Curriculum Staff n=12		Students n=167		Teachers n=173		Composite Mean n=497	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
The Teacher Will:															
PLANNING:															
1.	Organize and utilize an advisory council in planning course content.	3.21		3.52		3.73		4.08		3.19		3.09		3.22	
2.	Use the advisory council in keeping abreast of new developments in vocational education.	3.33		3.80		3.64		3.83		3.44		3.18		3.36	
*3.	Identify from an occupational or task analysis the skills and information to be taught for an appropriate occupation.	3.96		4.28	(7)	4.05		4.50	(2)	3.71		3.81		3.86	
*4.	Identify competencies needed for students to possess to enable them to enter an occupational skill.	4.26	(7)	4.36	(3)	4.41	(5)	4.17	(9)	3.98		4.13		4.13	
**5.	Determine educational needs and goals of students.	4.24	(8)	4.12		4.45	(2)	4.08		4.16		4.21	(9)	4.20	(9)
*6.	Form objectives of the vocational and technical program.	4.14		4.32	(5)	4.32	(8)	4.25	(6)	3.80		4.03		4.01	
*7.	Select and develop instructional content for lessons, units and courses.	4.30	(5)	4.56	(1)	4.23		4.17	(9)	3.98		4.36	(3)	4.22	(7)
**8.	Develop a variety of methods and techniques of teaching.	4.19	(9)	4.00		4.05		4.42	(4)	4.22	(6)	4.32	(5)	4.24	(5)
*9.	Organize the sequence of learning tasks.	4.01		4.00		4.05		3.83		3.92		4.05		3.99	
*10.	Determine and select tools and equipment necessary for the learning experiences of students.	4.06		4.32	(5)	4.05		3.83		4.07		4.13		4.09	
*11.	Determine and select instructional media and aids for student learning experiences.	3.87		4.24	(9)	3.91		4.00		3.98		4.02		3.98	

*Items rated 3.50 or higher by all groups
**Items rated 4.00 or higher by all groups
()Indicates ranking of top ten percent

TABLE XXIV (CONTINUED)

Item No.	Competencies	Adm. n=98		Advisory Council n=25		PPDC n=22		Curriculum Staff n=12		Students n=167		Teachers n=173		Composite Mean n=497	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
12.	Develop procedures for working with disadvantaged students.	3.63		3.44		3.50		3.67		3.74		3.28		3.53	
*13.	Develop safety rules and regulations.	4.34	(3)	3.76		4.18		4.42	(4)	3.98		3.88		4.02	
EXECUTION:															
14.	Direct group discussion.	3.46		3.52		3.77		3.67		3.51		3.60		3.55	
15.	Moderate panel discussions.	3.13		3.12		3.50		2.92		3.00		2.97		3.04	
**16.	Use demonstrations in the learning experiences.	4.09		4.28	(7)	4.45	(2)	4.50	(2)	4.36	(2)	4.34	(4)	4.30	(3)
*17.	Conduct field trips for learning experiences.	3.87		3.76		3.91		3.83		4.02		3.86		3.91	
18.	Direct role playing	2.95		3.04		3.09		3.33		3.19		3.20		3.14	
19.	Present lectures.	3.19		3.20		3.36		2.58		3.19		3.46		3.28	
20.	Conduct home visits.	3.24		2.84		3.23		3.25		2.99		2.79		2.98	
*21.	Identify, select and use resource persons to present information.	3.79		3.76		3.68		3.67		3.87		3.72		3.78	
*22.	Use a multiple of audiovisuals.	3.60		3.80		3.59		3.83		3.98		3.75		3.79	
23.	Set up displays to present occupational information.	3.37		3.24		2.91		3.42		3.53		3.24		3.35	
24.	Direct programmed instruction (teaching machine or text).	2.96		3.16		2.86		2.58		3.07		3.09		3.04	
*25.	Direct laboratory experiences.	4.02		3.92		4.09		4.00		3.92		4.16		4.03	
*26.	Maintain and use safety rules and regulations.	4.31	(4)	3.88		4.23		4.58	(1)	4.07		4.09		4.13	
*27.	Recognize, interpret and utilize student actions and behaviors (cues).	3.96		3.80		4.18		4.00		4.06		4.09		4.04	
*28.	Reinforce learning through positive reinforcement techniques.	3.94		3.92		4.14		4.25	(6)	4.31	(3)	4.12		4.14	
29.	Reproduce instructional materials using various reproduction equipment.	3.26		2.84		3.05		3.17		3.69		3.46		3.44	

*Items rated 3.50 or higher for all groups
**Items rated 4.00 or higher by all groups
( ) indicates ranking of top ten percent

TABLE XXIV (CONTINUED)

Item No.	Competencies	Adm. n=98 Mean	Rank	Advisory Council n=25 Mean	Rank	PPDC n=22 Mean	Rank	Curriculum Staff n=12 Mean	Rank	Students n=167 Mean	Rank	Teachers n=173 Mean	Rank	Composite Mean n=497 Mean	Rank
*30.	Properly maintain facilities and equipment.	4.18		4.04		4.18		3.92		4.20	(8)	4.19		4.18	
EVALUATION:															
*31.	Evaluate text and reference materials to meet course objectives.	3.91		4.04		4.05		4.08		4.05		4.10		4.04	
*32.	Establish the evaluative criteria for lessons, units and courses.	3.88		4.12		4.18		3.83		3.88		4.06		3.97	
*33.	Determine if evaluative criteria exist and select measures appropriate to the evaluative criteria.	3.68		3.84		3.95		3.83		3.59		3.71		3.68	
*34.	Establish criteria and methods for classroom or shop-laboratory performances.	3.94		3.84		4.05		4.00		3.89		4.05		3.96	
*35.	Establish criteria for student self-evaluation.	3.80		3.72		3.91		4.00		3.62		3.77		3.73	
36.	Direct student self-evaluation.	3.71		3.56		3.86		3.42		3.54		3.61		3.61	
*37.	Interpret evaluation data for students and parents.	3.95		3.64		3.95		3.92		3.73		3.71		3.78	
**38.	Evaluate one's own techniques and methods of teaching.	4.49	(1)	4.12		4.32	(8)	4.08		4.37	(1)	4.43	(1)	4.39	(1)
*39.	Evaluate students' progress in class, home and laboratory assignments.	4.15		4.12		4.32	(8)	3.83		4.18		4.18		4.17	
*40.	Form a variety of testing methods, both objective and subjective.	3.89		3.64		3.86		3.50		4.10		4.05		3.99	
*41.	Evaluate classroom facilities and equipment.	3.77		3.72		3.68		3.83		3.91		3.95		3.88	

*Items rated 3.50 or higher by all groups
**Items rated 4.00 or higher by all groups
()Indicates ranking of top ten percent

TABLE XXIV (CONTINUED)

Item No.	Competencies	Adm. n=98 Mean	Rank	Advisory Council n=25 Mean	Rank	PPDC n=22 Mean	Rank	Curriculum Staff n=12 Mean	Rank	Students n=167 Mean	Rank	Teachers n=173 Mean	Rank	Composite Mean n=497 Mean	Rank
GUIDANCE:															
42.	Interview students and parents	3.55		3.72		3.91		3.75		3.40		3.55		3.53	
43.	Evaluate all data about students for selective purposes.	3.47		3.60		3.68		3.42		3.41		3.48		3.47	
44.	Select and assign students for the program.	3.20		3.40		3.77		3.17		2.96		3.44		3.24	
45.	Assemble and display occupational information.	3.41		3.40		3.59		3.50		3.55		3.48		3.49	
46.	Present related occupational information.	3.49		3.08		3.73		3.67		3.52		3.50		3.50	
*47.	Provide students with resource materials on occupational opportunities.	3.71		3.68		3.59		3.58		3.80		3.69		3.72	
*48.	Refer students to guidance counselors or other qualified personnel for occupational and educational information.	3.80		3.72		3.64		3.00		3.83		3.52		3.68	
49.	Conduct visits to students' homes regarding student educational development.	3.22		2.72		3.45		3.08		2.88		2.68		2.90	
50.	Assist students with personal and social problems.	3.30		3.04		3.41		3.25		3.34		3.45		3.35	
51.	Assist students with scholastic problems.	3.51		3.64		3.77		3.25		3.73		3.66		3.65	
*52.	Establish an open door counseling policy.	3.86		3.64		4.27		3.75		3.91		4.03		3.94	
*53.	Assist students in seeking employment.	4.13		3.84		4.23		3.83		3.77		3.87		3.90	
54.	Collect and disseminate student follow-up data.	3.70		3.32		4.23		3.50		3.32		3.37		3.46	
*55.	Utilize follow-up data to up-date, improve and revise the curriculum.	4.03		4.00		4.32	(8)	3.92		3.69		3.64		3.79	

*Items rated 3.50 or higher by all groups
**Items rated 4.00 or higher by all groups
()Indicates ranking of top ten percent

TABLE XXIV (CONTINUED)

Item No.	Competencies	Adm. n=98 Mean	Rank	Advisory Council n=25 Mean	Rank	PPDC n=22 Mean	Rank	Curriculum Staff n=12 Mean	Rank	Students n=167 Mean	Rank	Teachers n=173 Mean	Rank	Composite Mean n=497 Mean	Rank
MANAGEMENT:															
56.	Define the operating rules and responsibilities of the learner and teacher.	3.79		3.80		3.68		3.17		3.63		4.03		3.80	
*57.	Determine short and long range supply, equipment and facility needs.	3.73		4.04		3.91		3.67		3.80		3.81		3.80	
58.	Consult the advisory council in planning facilities, equipment and supply needs.	3.39		3.64		3.86		3.17		3.47		3.31		3.42	
59.	Maintain a running inventory of supplies and equipment.	3.73		3.40		3.86		3.42		3.52		3.62		3.60	
60.	Develop and implement a policy for use of facilities, equipment and supplies.	3.72		3.76		3.86		3.33		3.66		3.72		3.70	
61.	Record and file cumulative student progress data.	3.69		3.52		3.59		3.17		3.48		3.51		3.53	
62.	Develop and maintain placement and follow-up data.	3.78		3.48		3.95		3.67		3.26		3.20		3.39	
63.	Develop and maintain occupational opportunities files.	3.73		3.60		4.09		3.25		3.60		3.31		3.54	
64.	Group students according to individual differences.	2.85		2.80		2.59		2.25		2.75		2.70		2.73	
*65.	Conduct student learning activities to achieve established goals, needs and objectives.	4.02		4.00		4.14		4.00		3.90		3.94		3.96	
PUBLIC AND HUMAN RELATIONS:															
*66.	Interpret and promote vocational and technical education within the school and community.	3.99		4.20		4.27		4.00		4.04		4.16		4.09	
**67.	Develop acceptable working relationships with students, staff and others connected with the school.	4.29	(6)	4.36	(3)	4.41	(5)	4.17	(9)	4.31	(3)	4.41	(2)	4.34	(2)

*Items rated 3.50 or higher by all groups
**Items rated 4.00 or higher by all groups
()Indicates ranking of top ten percent

TABLE XXIV (CONTINUED)

Item No.	Competencies	Adm. n=98		Advisory Council n=25		PPDC n=22		Curriculum Staff n=12		Students n=167		Teachers n=173		Composite Mean n=497	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
*68.	Keep community and school informed of new developments in vocational and technical education using a variety of methods and techniques.	4.04		4.12		4.23		3.83		4.08		3.98		4.04	
*69.	Maintain liaison with community members and professional, service, fraternal, social and religious organizations.	3.81		3.80		3.95		3.67		4.10		3.88		3.93	
70.	Serve as a resource person to the community agencies and organizations.	3.78		3.52		4.00		3.42		3.86		3.76		3.79	
71.	Maintain liaison with employment agencies.	3.94		3.72		3.82		3.42		3.75		3.54		3.71	
*72.	Maintain liaison with business and industry.	4.10		4.20		4.41	(5)	3.92		3.93		3.88		3.98	
73.	Consult the advisory council periodically to get their expectations of the vocational and technical program.	3.48		3.80		3.91		3.67		3.60		3.47		3.56	
74.	Serve in community, civic, service, or social organizations to improve the image of vocational and technical programs.	3.57		3.72		3.91		3.42		3.67		3.65		3.65	
*75.	Maintain good public relations with parents.	4.16		3.56		4.23		4.00		4.20	(8)	4.06		4.11	
PROFESSIONAL ROLE:															
*76.	Plan a personal continuing educational program.	3.79		3.80		3.95		3.92		3.94		3.90		3.89	
**77.	Acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements.	4.18		4.44	(2)	4.64	(1)	4.08		4.22	(6)	4.26	(7)	4.25	(4)
*78.	Keep credentials up to date.	4.15		3.88		4.23		4.17	(9)	4.25	(5)	4.27	(6)	4.22	(7)

*Items rated 3.50 or higher by all groups
**Items rated 4.00 or higher by all groups
()Indicates ranking of top ten percent

TABLE XXIV (CONTINUED)

Item No.	Competencies	Adm. n=98 Mean	Rank	Advisory Council n=25 Mean	Rank	PPDC n=22 Mean	Rank	Curriculum Staff n=12 Mean	Rank	Students n=167 Mean	Rank	Teachers n=173 Mean	Rank	Composite Mean n=497 Mean	Rank
*79.	Support professional organizations through membership and active participation.	3.74		3.60		3.95		4.00		3.84		3.77		3.79	
*80.	Attempt to improve the image of vocational and technical education through active membership in professional organizations.	3.91		3.72		4.00		3.75		3.85		3.83		3.85	
**81.	Practice professionalism with school personnel and others.	4.36	(2)	4.24	(9)	4.45	(2)	4.25	(6)	4.10		4.26	(7)	4.23	(6)
*82.	Participate in and/or plan an inservice education program.	3.83		3.52		3.82		3.92		3.78		3.71		3.75	
STUDENT VOCATIONAL ORGANIZATIONS:															
*83.	Secure approval from administration for establishing a student vocational organization.	4.01		3.72		4.00		3.67		3.92		3.84		3.90	
*84.	Organize and promote school and community support for a student vocational organization.	3.74		3.52		3.95		3.83		3.93		3.73		3.80	
85.	Help students plan a meeting for and organize a student vocational organization.	3.62		3.36		4.09		3.75		3.92		3.71		3.76	
86.	Help establish and assist in conducting a program of work for a student vocational organization.	3.62		3.40		3.95		3.58		3.78		3.56		3.66	
87.	Conduct leadership development seminars for student vocational organization members.	3.55		3.60		3.91		3.50		3.53		3.49		3.54	
*88.	Encourage affiliation of the student organization with state and national activities.	3.50		3.52		3.82		3.83		3.73		3.71		3.67	

*Items rated 3.50 or higher by all groups
**Items rated 4.00 or higher by all groups
()Indicates ranking of top ten percent

TABLE XXIV (CONTINUED)

Item No.	Competencies	Adm. n=98 Mean	Rank	Advisory Council n=25 Mean	Rank	PPDC n=22 Mean	Rank	Curriculum Staff n=12 Mean	Rank	Students n=127 Mean	Rank	Teachers n=173 Mean	Rank	Composite Mean n=497 Mean	Rank
*89.	Coordinate student vocational organization activities with instructional activities.	3.79		3.48		4.14		4.17 (9)		3.77		3.73		3.77	
GENERAL SCHOOL ACTIVITIES:															
90.	Participate in non-instructional school duties, i.e., PTA, chaperoning	3.48		2.92		3.41		3.42		3.37		2.98		3.24	
91.	Sponsor non-vocational clubs, societies and special interest groups.	2.78		2.08		2.77		2.50		2.99		2.57		2.74	
*92.	Supervise student teaching and cooperate with colleges and universities in providing learning experiences for student teachers.	3.83		3.80		4.05		3.92		4.00		3.60		3.82	

*Items rated 3.50 or higher by all groups
**Items rated 4.00 or higher by all groups
()Indicates ranking of top ten percent

important competency. An item rated 2.50 through 3.49 was considered to be an important competency.

The writer believed that a visual comparison of the competencies and their mean responses would allow for the reflection of any major differences among the groups on the importance placed on the rated items. An effort was made to locate ratings of items that differed considerably from the ratings of the other groups. One may see in the table that most of the ratings of the items by the groups compared favorably and only in rare cases were noteworthy exceptions depicted.

Further analysis of the data in Table XXIV allows one to see that all six groups rated 54 of the same competencies as very important, (3.50 or higher). These items are identified in the table with either one or two asterisks preceding the item number. The following listed number of items were rated in that very important group: 10 of 13 from planning; 9 of 17 from execution; 10 of 11 from evaluation; 5 of 14 from guidance; 2 of 10 from management; 6 of 10 from public and human relations; 7 of 7 from professional role; 4 of 7 from student vocational organizations; and 1 of 3 from the general school activities.

It was also revealed in the table that 7 of the 54 items rated very important received ratings of 4.00 or more by all groups. These 7 items are identified with two asterisks preceding the item number. Two of these items were numbers 5 and 8 from the planning area, "determine educational needs and goals of students" and "develop a variety of methods and techniques of teaching." Two items from the professional role area, number 77, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements,"

and number 81, "practice professionalism with school personnel and others," were included among the 7 items.

Item 16 from the execution area, "use demonstrations in the learning experiences," item 38 from the evaluation area, "evaluate one's own techniques and methods of teaching," and item 67 from the public and human relations area, "develop acceptable working relationships with students, staff and others connected with the school," were all rated 4.00 or more by all groups.

Responses to the items by the groups also revealed that administrators, professional personnel development council members, students and teachers considered all 92 items important or higher. The advisory council members considered 91 of the 92 items important or higher. The one item they rated as having little or no importance was number 91, "sponsor non-vocational clubs, societies, and special interest groups," from the general school activities area. Of interest was that the item was not rated above 3.00 by any group.

The state department curriculum staff considered all items important or higher except item 64, "group students according to individual differences," from the management area. They considered this item of little or no importance.

The administrators, curriculum staff and professional personnel development council members considered item 49, "conduct visits to students' homes regarding student educational development," from the guidance area as being more important than did student teachers and advisory council members.

The State Department curriculum staff members and professional personnel development council members considered item 89, "coordinate

student vocational activities with instructional activities," from the student vocational organization area, as being more important than the other groups. The state department curriculum staff rated the item in the top ten percent.

The professional personnel development council members rated item 54, "collect and disseminate student follow-up data," from the guidance area, as being considerably more important than did the other groups. They also considered item 85, "help students plan a meeting for and organize a student vocational organization," from the student vocational organization area, as being more important than did the other groups. They were the only group rating it more than 4.00.

As revealed in the table, the curriculum staff rated item 19, "present lectures," from the execution area, 2.58, which was a considerably lower rating than the ratings given by the other groups. The curriculum staff also rated item 24, "direct programmed instruction (teaching machine or text)," from the execution area somewhat lower than the other groups. This rating may very well be influenced by the nature and interest of the staff due to their being curriculum specialists. Another item they rated considerably lower than the other groups was item 48, "refer students to guidance counselors or other qualified personnel for occupational and educational information," from the guidance area. They rated the item important whereas the other groups rated the item very important.

The advisory council, professional personnel development council and curriculum staff rated item one, "organize and utilize an advisory council in planning course content," from the planning area, as being very important, whereas the other groups rated the item important. In

addition, the advisory council rated item 75, "maintain good public relations with parents," from the public and human relations area, considerably lower than the ratings given the item by the other groups, yet the item was still considered a very important item.

The students placed less emphasis on item six, "form objectives of vocational and technical education programs," from the planning area, than did other groups rating the item. The student rating, however, was very important, but happened to be the only rating of the item by the groups that was less than 4.00.

An analysis of the top ten percent of rated competencies from each group allows one to see that all six groups rated item number 67, "develop acceptable working relationships with students, staff and others who are connected with the school," from the public and human relations area, in the top ten percent.

All groups except the administrators rated item 16, "use demonstrations in the learning experiences," from the execution area, in the top ten percent. In addition, all groups but the students rated item 81 from the professional role area, "practice professionalism with school personnel and others," in the top ten percent.

The groups of administrators, professional personnel development council members, students, and teachers rated item 38, "evaluate one's own techniques and methods of teaching," from the evaluation area, in the top ten percent. Item 77, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," from the professional role area, was rated in the top ten percent by advisory council, professional personnel development council members, student and teacher groups.

Item eight, "develop a variety of methods and techniques of teaching," from the planning area, was rated in the top ten percent by groups of administrators, curriculum staff, students and teachers. Another item from the planning area, number seven, "select and develop instructional content for lessons, units and courses," was rated in the top ten percent by administrators, advisory council members, curriculum staff members and teachers. In addition, item number four from the planning area, "identify competencies needed for students to possess to enable them to enter an occupational skill," was ranked in the top ten percent by administrators, advisory council members, professional personnel development council members and curriculum staff members.

Three groups, curriculum staff members, students and teachers rated item 78, "keep credentials up to date," from the professional role area, in the top ten percent. Also, three groups, administrators, professional personnel development council members and teachers rated item five from the planning area, "determine educational needs and goals of students," in the top ten percent. Another item from the planning area, number six, "form objectives of vocational and technical education programs," was rated in the top ten percent by advisory council, professional personnel development council and curriculum groups.

The curriculum and student groups rated item 28, "reinforce learning through positive reinforcement techniques," from the execution area, in the top ten percent. Also, two groups, the administrators and curriculum staff, rated item 26 from the execution area, "maintain and use safety rules and regulations," in the top ten percent. The administrators and curriculum staff also rated item 13 from planning, "develop safety rules and regulations," in the top ten percent.

The groups of advisory council and curriculum rated item three from the planning area, "identify from an occupational or task analysis the skills and information to be taught for an appropriate occupation," in the top ten percent.

Of interest was that item 30, "properly maintain facilities and equipment," from the execution area, was rated in the top ten percent by only the student group. In addition, item 39 from the evaluation area, "evaluate students' progress in class, home and laboratory assignments," was rated in the top ten percent by only one group, the professional personnel development council. Item number 75, "maintain good public relations with parents," from the public and human relations area, was rated in the top ten percent by only one group, the students.

The advisory council members rated items 10 and 11 from the planning area, "determine and select tools and equipment necessary for learning experiences of students," and "determine and select instructional media and aids for student learning experiences," in the top ten percent of their group.

Of interest was that the professional personnel development council group rated item 72 from the public and human relations area, "maintain liaison with business and industry," in the top ten percent. Also, they rated item 55 from guidance, "utilize follow-up data to up-date, improve and revise curriculum," in the top ten percent. Another item number 89, "coordinate student vocational organizational activities with instructional activities," from the student vocational organization area, was rated in the top ten percent by the curriculum staff.

Another way of viewing the data was by examining the composite mean responses to each item. An overview of these composite responses allows

one to see that all 92 competencies were rated important or higher. Further analysis of the responses to the items revealed that 72 of the 92 competencies were rated 3.50 or higher. Of those rated 3.50 or more, the following statistics are interesting: 11 items were from the planning area; 11 items were from the execution area; 10 items were from the evaluation area; 10 were from the public and human relations area; 7 were from the professional role area; 8 were from the guidance area; 7 were from the management area; 7 were from the student vocational organization area; and 1 was from the general school activities area.

Of the 72 items receiving a composite rating of 3.50 or more, 23 from the following listed areas were rated 4.00 or more: 7 from the planning area; 7 from the execution area; 2 from the evaluation area; 4 from the public and human relations area; and 3 from the professional role area.

The item receiving the highest composite rating was number 38 from the evaluation area, "evaluate one's own techniques and methods of teaching." An item from the public and human relations area, number 67, "develop acceptable working relationships with students, staff and others connected with the school," received the second highest composite rating.

Three items from the planning area, number 5, "determine educational needs and goals of students," number 7, "select and develop instructional content for lessons, units and courses," and number 8, "develop a variety of methods and techniques of teaching," all received a high enough composite rating to be in the top ten percent.

Item number 16 from the execution area, "use demonstrations in the learning experiences," received the third highest composite rating.

Three items from the professional role area, number 77, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," number 81, "practice professionalism with school personnel and others," and 78, "keep credentials up to date," all received composite ratings high enough to allow them to be in the top ten percent.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary

The major purpose of this study was to identify and validate teaching competencies needed by teachers of vocational and technical education in Oklahoma. The specific objectives were:

1. To identify teacher competencies needed by vocational and technical education teachers;
2. To validate teacher competencies needed by vocational and technical education teachers in Oklahoma;
3. To determine common competencies of vocational and technical education teachers in Oklahoma; and
4. To compare competency ratings of the groups used in the study.

The phases conducted to achieve the purpose and objectives of the study consisted of instrumentation, selection of respondents, collection of data, treatment of the data, and the presenting and analyzing of the data.

In order to identify competencies believed to be needed by vocational and technical teachers, the writer reviewed competencies contained in research studies conducted by Cotrell, Halfin and Courtney, and others. The writer, then, with the assistance of the director of

the MIPP VTTE project, developed an instrument comprised of teacher competencies believed to be those of most importance for teachers of vocational and technical education. The instrument was then reviewed and refined by a committee of experts and determined to be usable for obtaining judgments from respondents.

To validate the competencies the writer asked selected groups of persons to rate the competencies as to their importance for vocational and technical education teachers. The groups of respondents selected were college students, vocational and technical education teachers, administrators, business and industry people, state department curriculum staff, and the professional personnel development council. When possible, respondents were randomly selected from the total population. In other cases, the total population was questioned.

To determine common competencies, the ratings of students and teachers were used. Based on established criterion, a separate list of common competencies was determined for the students and teachers.

To achieve objective number four, that is to determine how the ratings of the competencies by the groups compared, the writer conducted a visual comparison of the ratings. An effort was made to detect any ratings that differed considerably. In those instances, a discussion addressed to these matters was undertaken in Chapter IV.

The purpose of the study grew out of the need for a validated list of competencies needed by vocational and technical education teachers in Oklahoma. Several researchers had conducted studies identifying what were possibly needed competencies, however, no such list had been validated for Oklahoma's vocational and technical teachers. It was with this problem in mind, coupled with a desire to assist in a special

project (MIPP VTTE) designed to develop a model to improve pre-service programs in vocational and technical teacher education, that this study became a reality.

Findings

1. All teacher groups rated 87 (94.5 percent) of the 92 rated competencies important or higher, thus, a core of 87 competencies to all teacher groups was established.
2. All teacher groups considered 30 (34.5 percent) of the 87 common competencies as very important (3.50 or higher rating).
3. All teacher groups rated all items in the areas of planning, evaluation, professional role, public and human relations, and student vocational organizations important or higher.
4. The teacher groups rated all but one item from each of the areas of execution, guidance and management as important or higher.
5. Only one of the three competencies in the general school activities area was considered important by all teacher groups. That item was number 92, "supervise student teaching and cooperate with colleges and universities in providing learning experiences for student teachers."
6. Teachers of agriculture and home economics rated "conduct home visits" as very important whereas the item was rated as of little or no importance by teacher groups of business and office, distributive education, industrial arts and technical education. Health and trade and industry teachers considered the item as important.
7. The teacher groups of business and office, health, industrial arts, and technical education rated "conduct visits to students' homes

regarding student educational development" as being of little or no importance. Teachers of distributive education, home economics and trade and industry rated the item important. Agriculture teachers rated the item very important..

8. Health and technical education teachers rated "group students according to individual differences" as being of little or no importance whereas the other groups rated the item important.
9. All teacher groups but technical education rated "participate in non-instructional school duties" as being important. Technical education teachers rated the item as being of little or no importance.
10. All teacher groups but industrial arts rated "sponsor non-vocational clubs, societies and special interest groups" as important. Industrial arts teachers rated the item as being of little or no importance, however, the rating was not a very much lower numerical rating than that of the other groups.
11. All teacher groups but home economics rated item 38, "evaluate one's own methods and techniques of teaching," in the top ten percent.
12. All teacher groups except distributive education and health rated item 16, "use demonstrations in the learning experiences," in the top ten percent.
13. Item 67, "develop acceptable working relationships with students, staff and others connected with the school," was rated in the top ten percent by all teacher groups except business and office, health and technical education.
14. Agriculture, business and office, health and home economics teachers all rated item 8, "develop a variety of methods and techniques of teaching," in the top ten percent.

15. All student groups rated 88 (95.6 percent) of the 92 competencies important or higher, establishing a core of 87 competencies common to all student groups.
16. All student groups judged 33 (37.5 percent) of the 88 common competencies as very important.
17. The student groups rated all items in the areas of planning, evaluation, public and human relations, professional role, student vocational organizations and general school activities important or higher.
18. The student groups rated all but one item from each of the areas of execution and management as important or higher. In addition, they rated all but two of the items in the guidance area as important or higher.
19. Student groups of industrial arts, technical education and trade and industry judged "conduct home visits" as being of little or no importance. Agriculture students rated the item very important whereas the other groups rated it important.
20. Student groups of home economics and technical education judged "select and assign students for the program" as being of little or no importance. Distributive education students rated the item very important whereas the other groups rated it important.
21. Student groups of agriculture and distributive education rated the item, "conduct home visits regarding student educational development" as being very important whereas students of business and office, health and home economics rated it important. The remaining groups rated the item as being of little or no importance.

22. Student groups of home economics, technical education and trade and industry rated "group students according to individual differences" as being of little or no importance. Distributive education students rated the item as being very important and the remaining groups rated it important.
23. All student groups but technical education and trade and industry rated item 16, "use demonstrations in the learning experiences," in the top ten percent.
24. All student groups but agriculture and trade and industry rated item 38, "evaluate one's own techniques and methods of teaching," and item 67, "develop acceptable working relationships with students, staff and others connected with the school," in the top ten percent.
25. Item 28, "reinforce learning through positive reinforcement techniques," was rated in the top ten percent by student groups of agriculture, business and office, home economics and industrial arts.
26. Student groups of business and office, industrial arts, technical education and trade and industry rated item 77, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," in the top ten percent.
27. All student and teacher groups rated 24 of the same competencies as being very important.
28. Mean responses to each item by all teachers and by all students revealed that both groups rated item 38, "evaluate one's own techniques and methods of teaching," the highest of the 92 competencies.

29. Mean responses to each item by all teachers and by all students revealed that both groups rated 6 of the same competencies in the top ten percent. Of the items, 2 were from the professional role area and one each from the areas of evaluation, public and human relations, planning and execution.
30. In the total group data, all groups of administrators, advisory council, professional personnel development council, curriculum staff, students and teachers rated 54 of the 92 competencies as very important.
31. Seven items, two each from the areas of planning and professional role and one from the areas of execution, evaluation and public and human relations were rated 4.00 or higher by all groups.
32. Mean responses in the total group data revealed that administrators, professional personnel development council members, students and teachers rated all 92 competencies important or higher.
33. The advisory council members and state department curriculum staff rated 91 of the 92 competencies important or higher.
34. All groups rated item 67, "develop acceptable working relationships with students, staff and others connected with the school," in the top ten percent.
35. All groups except administrators rated item number 16, "use demonstrations in the learning experiences," in the top ten percent.
36. All groups but the administrators rated item number 77, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," in the top ten percent.
37. All groups but the students rated item 81, "practice professionalism with school personnel and others," in the top ten percent.

38. The advisory council members and state department curriculum staff were the only two groups not rating item 38, "evaluate one's own techniques and methods of teaching," in the top ten percent.
39. Administrators, curriculum staff, students and teachers rated item 8, "develop a variety of methods and techniques of teaching," in the top ten percent.
40. Administrators, advisory council members, curriculum staff and teachers rated item 7, "select and develop instructional content for lessons, units and courses in the top ten percent.
41. The administrators, advisory council members, curriculum staff and professional personnel development council members rated item 4, "identify competencies needed for students to possess to enable them to enter an occupational skill," in the top ten percent.
42. A composite rating of each item revealed that all 92 competencies were considered important or higher.
43. Of the 92 competencies judged important or higher, 72 were rated very important (3.50 or more).
44. Of the 72 competencies rated very important, 7 each from the planning and execution areas, 2 from the evaluation area, 4 from the public and human relations area and 3 from the professional role area for a total of 23 received a composite rating of 4.00 or more.
45. The composite ratings revealed that item 38, "evaluate one's own techniques and methods of teaching," was rated the highest of any competency with a mean response of 4.39.
46. Item number 67 from the public and human relations area, "develop acceptable working relationships with students, staff and others connected with the school," received the second highest composite rating.

47. Item 16, "use demonstrations in the learning experiences," received the third highest composite rating.
48. Three items from the planning area, number 5, "determine educational needs and goals of students," number 7, "select and develop instructional content for lessons, units and courses," and number 8, "develop a variety of methods and techniques of teaching," received high enough composite ratings to be in the top ten percent.
49. Item 77, "acquire new occupational skills, knowledge and competencies necessary to keep pace with technological advancements," received a composite rating of 4.25 which was the fourth highest composite rating.
50. An item from the professional role area, number 78, "keep credentials up to date," received a composite rating to allow it to be in the top ten percent.

Conclusions

Based on the data analyzed it appears that the following listed conclusions are appropriate.

1. Since a majority of the competencies were judged by all groups as being important for vocational and technical education teachers, it is concluded that this list of competencies is a valid list upon which curriculum can be built.
2. Since a majority of the competencies were judged to be common by students and teachers of the different groups, it is concluded that core curriculum for pre-service and in-service teacher training can be developed using the list of competencies validated in this study.

3. It is concluded that the 24 competencies rated very important by all teacher and student groups should be used in the development of core curriculum.
4. That the high agreement of responses indicated homogeneity of thoughts by the different groups rating the competencies.
5. That the various groups rating the competencies have similar role expectations of vocational and technical education teachers.
6. That teachers as well as others are products of their education and work experiences, and if major changes are to be effected to update some of our more traditional teacher education programs, then it appears that these changes will have to come through the efforts of students and/or professors in teacher education.
7. That vocational and technical education is a cooperative effort of school, community, etc., and that business and industry as well as others should be involved in curriculum development for vocational and technical education teacher training.
8. Based on 54 competencies being rated very important by all six groups, it is concluded that these competencies should be used in the development of core curriculum for vocational and technical teacher education.

Recommendations

It appears that the following recommendations regarding teacher education are appropriate.

1. That these lists of validated competencies be distributed to vocational and technical teacher educators, state supervisors, vocational and technical teachers and others and that the lists be used in curriculum development to try to improve pre-service and in-service training programs.
2. Further, that vocational and technical teacher educators give serious consideration to developing core curricula courses in teacher education.
3. That the MIPP VTTE committee use these lists of validated competencies in their forthcoming model designed to improve pre-service programs in vocational and technical teacher education.
4. That state supervisors of the occupational areas, advisory councils, and the research, planning and evaluation section of the State Department of Vocational and Technical Education investigate the possibility of using these lists of competencies as a tool in evaluating vocational and technical education programs.
5. That the State Department of Vocational and Technical Education sponsor a conference on competency-based teacher education for vocational and technical teacher educators in Oklahoma.

It appears that the following recommendations are in order relative to further study.

1. That the validated lists of teacher competencies be further reviewed and refined by vocational and technical educators.

2. That vocational and technical teacher educators identify additional competencies needed by vocational and technical education teachers.
3. That a similar study, using the competencies identified and validated in this study, be conducted with non-vocational teachers and the ratings compared with those of vocational and technical education teachers.
4. That a similar study be conducted with vocational and technical teachers using an instrument with greater discriminating potential.
5. That other methods of identifying competencies needed by vocational and technical education teachers be used.
6. That selected persons from the various groups used in the study meet in a conference to consider the implications this study might have for curriculum development and improvement of vocational and technical education programs.
7. That vocational and technical teacher educators involve representatives of business and industry, administrators, state department curriculum staff and others in future curriculum concerns.

Implications

Based on the findings of this study it appears that competency-based and/or performance-based teacher education would be a reasonable and logical way of training vocational and technical education teachers. However, a concern is that this movement may be proceeding at too rapid a pace.

It also appears that competency-based and/or performance-based teacher education should be further explored for its educational value and that movement toward such programs should be done with caution. Analysis of such programs in operation and research studies done in competency-based and/or performance-based teacher education should be accomplished prior to and during the initiation and conduct of such programs.

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APPENDIX A

QUESTIONNAIRE ADMINISTERED TO

STUDENTS AND TEACHERS

DIRECTIONS: Please rate the following competencies according to their importance for teachers teaching your subject matter by checking the appropriate box.

PLANNING

The Teacher Will:

	No Importance	Some Importance	Important	Very Important	Extremely Important
1. Organize and utilize an advisory council in planning course content.					
2. Use the advisory council in keeping abreast of new developments in vocational and technical education.					
3. Identify from an occupational or task analysis the skills and information to be taught for an appropriate occupation.					
4. Identify competencies needed for students to possess to enable them to enter an occupational skill.					
5. Determine educational needs and goals of students.					
6. Form objectives of the vocational and technical education program.					
7. Select and develop instructional content for lessons, units and courses.					
8. Develop a variety of methods and techniques of teaching.					
9. Organize the sequence of learning tasks.					

	No Importance	Some Importance	Important	Very Important	Extremely Important
10. Determine and select tools and equipment necessary for the learning experiences of students.					
11. Determine and select the instructional media and aids for student learning experiences.					
12. Develop procedures for working with disadvantaged students.					
13. Develop safety rules and regulations.					

EXECUTION

The Teacher Will:

14. Direct group discussions.					
15. Moderate panel discussions.					
16. Use demonstrations in the learning experience.					
17. Conduct field trips for learning experiences.					
18. Direct role playing.					
19. Present lectures.					
20. Conduct home visits.					
21. Identify, select and use resource persons to present information.					
22. Use a multiple of audiovisuals.					
23. Set up displays to present occupational information.					

	No Importance	Some Importance	Important	Very Important	Extremely Important
24. Direct programmed instruction (teaching machines or text).					
25. Direct laboratory experiences.					
26. Maintain and use safety rules and regulations.					
27. Recognize, interpret and utilize student actions and behaviors (cues).					
28. Reinforce learning through positive reinforcement techniques.					
29. Reproduce instructional materials using various reproduction equipment.					
30. Properly maintain facilities and equipment.					

EVALUATION

The Teacher Will:

31. Evaluate text and reference materials to meet course objectives.					
32. Establish the evaluative criteria for lessons, units and courses.					
33. Determine if evaluative criteria exist and select measures appropriate to the evaluative criteria.					
34. Establish criteria and methods for classroom or shop-laboratory performances.					
35. Establish criteria for student self-evaluation.					
36. Direct student self-evaluation.					

	No Importance	Some Importance	Important	Very Important	Extremely Important
37. Interpret evaluation data for students and parents.					
38. Evaluate one's own techniques and methods of teaching.					
39. Evaluate student's progress in class, home and laboratory assignments.					
40. Form a variety of testing methods, both objective and subjective.					
41. Evaluate classroom facilities and equipment.					

GUIDANCE

The Teacher Will:

42. Interview students and parents.					
43. Evaluate all data about students for selective purposes.					
44. Select and assign students for the program.					
45. Assemble and display occupational information.					
46. Present related occupational information.					
47. Provide students with resource materials on occupational opportunities.					
48. Refer students to guidance counselors or other qualified personnel for occupational and educational information.					
49. Conduct visits to students' homes regarding student educational development.					

	No Importance	Some Importance	Important	Very Important	Extremely Important
50. Assist students with personal and social problems.					
51. Assist students with scholastic problems.					
52. Establish an open door counseling policy.					
53. Assist students in seeking employment.					
54. Collect and disseminate student follow-up data.					
55. Utilize follow-up data to up-date, improve and revise the curriculum.					

MANAGEMENT

The Teacher Will:

56. Define the operating rules and responsibilities of the learner and teacher.					
57. Determine short and long range supply, equipment and facility needs.					
58. Consult the advisory council in planning facilities, equipment and supply needs.					
59. Maintain a running inventory of supplies and equipment.					
60. Develop and implement a policy of use of facilities, equipment and supplies.					
61. Record and file cumulative student progress data.					
62. Develop and maintain placement and follow-up data.					
63. Develop and maintain occupational opportunities files.					

	No Importance	Some Importance	Important	Very Important	Extremely Important
64. Group students according to individual differences.					
65. Conduct student learning activities to achieve established goals, needs, and objectives.					

PUBLIC AND HUMAN RELATIONS

The Teacher Will:

	No Importance	Some Importance	Important	Very Important	Extremely Important
66. Interpret and promote vocational and technical education within the school and community.					
67. Develop acceptable working relationships with students, staff and others connected with the school.					
68. Keep community and school informed of new developments in vocational and technical education using a variety of methods and techniques.					
69. Maintain liaison with community members and professional, service, fraternal, social and religious organizations.					
70. Serve as a resource person to the community agencies and organizations.					
71. Maintain liaison with employment agencies.					
72. Maintain liaison with business and industry.					
73. Consult the advisory council periodically to get their expectations of the vocational and technical programs.					

	No Importance	Some Importance	Important	Very Important	Extremely Important
74. Serve in community civic, service or social organizations to improve the image of vocational and technical programs.					
75. Maintain good public relations with parents.					

PROFESSIONAL ROLE

The Teacher Will:

76. Plan a personal continuing educational program.					
77. Acquire new occupational skills, knowledge and competencies to keep pace with technological advancements.					
78. Keep credentials up to date.					
79. Support professional organizations through membership and active participation.					
80. Attempt to improve the image of vocational and technical education programs through active membership in professional organizations.					
81. Practice professionalism with school personnel and others.					
82. Participate in and/or plan an in-service education program.					

STUDENT VOCATIONAL ORGANIZATIONS

The Teacher Will:

83. Secure approval from administration for establishing a student vocational organization.					

	No Importance	Some Importance	Important	Very Important	Extremely Important
84. Organize and promote school and community support for a student vocational organization.					
85. Help students plan a meeting for and organize a student vocational organization.					
86. Help establish and assist in conducting a program of work for a student vocational organization.					
87. Conduct leadership development seminars for student vocational organization members.					
88. Encourage affiliation of the student organization with state and national activities.					
89. Coordinate student vocational organization activities with instructional activities.					
GENERAL SCHOOL ACTIVITIES					
90. Participate in non-instructional school duties, i.e., PTA, chaperoning.					
91. Sponsor non-vocational clubs, societies, and special interest groups.					
92. Supervise student teaching and cooperate with colleges and universities in providing learning experiences for student teachers.					

*If this list of competencies does not include competencies you deem important for teachers teaching your subject matter, please list them below.

NOTE: An identical questionnaire was administered to administrators, advisory council members, State Department of Vocational and Technical Education Curriculum Staff Members, and Professional Personnel Development Council Members. Directions and comment sections were changed to read: "for all teachers of vocational and technical education."

APPENDIX B

COVER LETTER

(STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION LETTERHEAD)

May 11, 1973

Dear

In view of the current interest in competency-based teacher education, Oklahoma State University, the Oklahoma State Department of Vocational and Technical Education, and the USOE are cooperating in a special project designed to improve preservice programs in Vocational and Technical Teacher Education.

You are invited to contribute to one vital portion of the project by rating the teacher competencies listed on the questionnaire as to their importance for teachers teaching your subject matter. These ratings will help teacher educators determine the important competencies for the preparation of future teachers.

A code for identification and follow-up of non-respondents has been written on the upper left corner of the questionnaire. Let me assure you that your ratings will be kept confidential. Neither you nor your school will be identified in the written results of this project.

Completion of the questionnaire will require less than fifteen minutes of your time. We would appreciate your completing the questionnaire and returning it to us as soon as possible so we may use your ratings to help determine the important teacher competencies.

Respectfully,

Zed F. DeVaughan, Jr.
Assistant Coordinator
Professional Personnel Development

Enclosure

cc: Dr. James P. Key, Project Director
Professor of Agricultural Education, OSU

Dr. Kenneth St. Clair, Project Advisor
Professor, College of Education, OSU

NOTE: Groups other than teachers and students were asked to rate competencies as to importance for all vocational and technical education teachers.

APPENDIX C

COMMENTS BY GROUPS

COMMENTS BY GROUPS

ADMINISTRATORS

I do not feel it is of any importance how well the student organizational club functions.

I often hear a teacher criticized because a club is not as active as some feel it should be.

Have a minimum of 5 years successful work experience in the teacher's field of teaching prior to his employment.

The teacher should affiliate with professional organizations in his and the school's area of education.

The teacher should be an integral part of the school staff.

The teacher should be loyal to his subject and school staff and administrators.

The teacher should be well versed on all reports necessary to the department.

AGRICULTURE TEACHERS

The teacher should have more knowledge of technical agriculture, i.e. animal science.

AGRICULTURE STUDENTS

The teachers should be fair, reasonable and polite.

ADVISORY COUNCIL MEMBERS

The teacher should first and foremost concentrate of being a good teacher.

If an activity is deemed important, degree of importance is something which depends largely on the teacher's position in the hierarchy and on very widely varying individual sets of circumstances.

It is very important that the instructor has either worked on the job and thoroughly understands the job requirements or has been exposed over a period of time to the type of jobs his particular field will be teaching.

An occupational or vo-tech teacher must be able to teach all safety requirements such as OSHA requires and stress their importance.

The teacher should believe in the free enterprise system and relate the importance to every skill, task, job, and attitude to the success of it, and all of us in it.

The competencies raise many questions. Perhaps my answers indicate my feeling that what the student needs is guidance as determined by the professional (the teacher) to be needed for his education, development and preparation for competing in this cold business world of reality.

BUSINESS AND OFFICE TEACHERS

It is very important that the teacher develop individual study units and direct individual study sessions, not purchased programmed materials, but units of study that each student can work at his own rate (developed by the teacher).

The teacher should have an excellent knowledge of the basic skills of the vocation to be taught.

CURRICULUM STAFF

I think that youth organizations are important, but teaching subject matter comes first. Our youth organization is not synonomous with the subject as are some others.

DISTRIBUTIVE EDUCATION TEACHERS

The most important criterion for vocational-technical teaching personnel is a strong belief that what they are doing is the most important job on earth. If they believe that, and work accordingly, no one needs to worry about the little things. They will all take care of themselves as the enthusiasm evidenced by a dedicated teacher bubbles over into the classwork or club work.

The main importance is to keep yourself ahead in the new techniques of teaching, on the job training and the areas taught in the curriculum.

HOME ECONOMICS STUDENTS

The teacher should maintain good working relationships with students.

The teacher should practice what he or she teaches, i.e., return tests on time.

The testing methods should be completely objective.

Home Economics teachers need to be able to keep sewing machines in good running order; this includes oiling, cleaning, minor repair and parts replacement. Perhaps a specific course in "The care and repair of appliances," especially those found in the home economics department. Many people, although accomplished seamstresses, still don't know even the basic rudiments of machine care and repair.

In general, I believe a home economics teacher should keep abreast of happenings in his/her field, have an affiliated organization, sponsor ballgames, banquets, etc., try to keep active in the community with extension clubs, church, etc., and let the counselor, vo-tech schools and employment agencies be concerned with vocations and finding jobs.

Some people do not seem to realize that vocational teachers are really people and that they just have 24 hours per day like everyone else. I honestly believe that too much is expected of vocational teachers.

Vocational teachers especially need an outgoing personality and the ability to get along well with students, parents, other faculty and community.

More personal interest should be given each individual student when he or she first enters college, especially at the freshman and sophomore level.

PROFESSIONAL PERSONNEL DEVELOPMENT COUNCIL

Recognize and make provisions for the differences in students, i.e., ability, background, training, attitude and needs.

TECHNICAL EDUCATION TEACHERS

We need diagnostic testing (determining deficiencies in course content and what areas students are weak in). Most teachers give a test in order to be able to give a letter grade at the end of the course. This misses the whole purpose of testing, i.e., evaluation of the course, instructor and student, and the location of deficiencies and most important, the correction of these deficiencies.

TECHNICAL EDUCATION STUDENTS

The teacher, should in his liaison with business and industry, induce them to contribute materials for instruction and research.

TRADE AND INDUSTRY TEACHERS

There are too many hours being wasted by instructors in repetitious courses, i.e., analysis, organization and shop management, instructional planning, all of which could be combined into one course allowing the instructor to spend the hours in industry updating his program. This would be especially advantageous to automotive instructors due to rapid changes taking place in industry.

APPENDIX D

FOLLOW-UP LETTER

(STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION LETTERHEAD)

August 22, 1973

Dear

In May of this year you were sent a questionnaire and a letter asking you to participate in a special project cooperatively sponsored by Oklahoma State University, the USOE, and the State Department of Vocational and Technical Education. In the letter you were asked to rate competencies as to their importance for teachers of your major teaching field.

Possibly you did not have time to complete the questionnaire and/or never received it. In the event this happened, I am enclosing another questionnaire in hopes that you will help me in this phase of the project.

Completion of the questionnaire will require less than ten minutes of your time. Will you please help us by completing the questionnaire and returning it to me as soon as possible.

Thank you very much.

Respectfully,

Zed DeVaughan, Assistant Coordinator
Professional Personnel Development

Enclosure

ZD/SCW-01/13

NOTE: A similar follow-up letter was sent to industrial arts teachers in September, 1973.

APPENDIX E

MEAN RESPONSES OF TEACHERS AND STUDENTS BY DISCIPLINES TO ITEMS ON THE TEACHER COMPETENCY QUESTIONNAIRE

TABLE XXV

MEAN RESPONSES OF TEACHERS AND STUDENTS BY DISCIPLINES
TO ITEMS ON THE TEACHER COMPETENCY QUESTIONNAIRE

Competency	Vo. Ag.		Bus. & Off.		Dist. Ed.		Health	Home Ec.		Ind. Arts		Tec. Ed.		T & I	
	T n=22	S n=39	T n=24	S n=29	T n=25	S n=14	T n=18	T n=26	S n=35	T n=16	S n=19	T n=15	S n=22	T n=27	S n= 9
1.	2.55	2.79	3.38	3.31	3.08	4.00	2.72	2.96	3.06	3.38	3.42	3.33	3.32	3.33	3.00
2.	2.50	2.97	3.50	3.41	3.32	4.07	2.83	2.88	3.26	3.19	3.74	3.60	3.91	3.59	3.44
3.	3.45	3.10	4.00	4.07	3.96	4.21	4.11	3.65	3.57	3.69	4.11	3.87	3.50	3.78	4.56
4.	4.05	3.54	4.58	4.17	4.16	4.07	4.44	4.00	4.09	3.50	3.95	4.33	4.05	3.96	4.56
5.	4.27	3.97	4.46	4.31	4.04	4.21	4.44	4.35	4.43	3.94	4.21	4.00	3.73	4.11	4.22
6.	3.86	3.51	4.29	4.17	4.08	4.07	4.33	4.00	3.46	3.56	3.84	4.13	4.00	3.96	4.22
7.	4.23	3.46	4.71	4.41	4.20	4.00	4.67	4.54	4.20	3.94	3.89	4.67	3.95	4.04	4.11
8.	4.41	3.95	4.54	4.52	4.16	3.86	4.61	4.50	4.74	3.94	4.05	4.33	4.00	4.07	3.89
9.	3.73	3.62	4.33	4.10	4.00	3.43	4.44	4.15	4.26	3.63	4.05	4.20	3.77	3.93	4.22
10.	4.23	3.92	4.42	4.21	4.00	4.07	4.28	4.38	4.23	3.94	4.00	3.87	3.73	3.81	4.56
11.	3.86	3.79	4.33	4.07	3.84	3.79	4.17	4.35	4.29	3.88	3.95	3.73	3.73	3.89	4.33
12.	3.32	3.77	3.33	3.90	3.24	3.43	3.39	3.35	4.14	3.06	3.89	2.73	3.14	3.56	3.22
13.	4.59	4.64	3.29	3.55	3.20	3.21	4.06	3.88	3.71	4.31	4.63	3.47	3.50	4.33	4.44
14.	3.45	3.38	3.79	3.34	3.96	3.93	3.44	3.96	4.00	3.38	3.05	3.20	3.41	3.30	3.33
15.	2.64	2.97	3.08	2.90	3.32	3.57	3.00	3.31	3.31	2.94	2.63	2.73	2.77	2.59	2.67
16.	4.36	4.15	4.46	4.72	4.32	4.43	4.33	4.38	4.49	4.19	4.42	4.13	3.82	4.37	4.67
17.	4.27	4.36	3.92	4.07	4.04	3.93	3.83	4.15	4.34	3.25	3.63	3.47	3.32	3.63	3.89
18.	3.05	3.15	3.04	3.24	3.80	3.71	3.67	3.31	3.51	2.56	2.84	2.87	2.55	3.07	3.33
19.	2.77	3.33	3.54	3.07	3.44	3.50	3.56	3.73	3.17	3.38	2.63	3.93	3.36	3.44	3.22
20.	4.68	4.38	2.25	2.59	2.40	3.29	2.56	3.58	3.29	1.75	2.05	1.93	1.59	2.59	2.00
21.	3.59	3.92	3.83	3.90	4.16	4.07	3.72	4.19	4.49	2.88	3.32	3.20	3.32	3.63	3.44
22.	3.77	3.67	3.58	4.10	3.72	4.14	3.78	4.23	4.34	3.50	3.95	3.40	3.77	3.78	3.78

TABLE XXV (CONTINUED)

Competency	Vo. Ag.		Bus. & Off.		Dist. Ed.		Health	Home Ec.		Ind. Arts		Tec. Ed.		T & I	
	T n=22	S n=39	T n=24	S n=29	T n=25	S n=14	T n=18	T n=26	S n=35	T n=26	S n=19	T n=15	S n=22	T n=27	S n= 9
23.	3.18	3.46	3.38	3.83	3.56	3.71	2.89	3.35	3.74	3.06	3.53	2.73	2.86	3.37	3.33
24.	2.82	2.95	3.13	3.31	3.04	3.36	3.22	3.19	3.29	3.13	2.95	2.87	2.59	3.22	3.00
25.	4.14	3.69	4.13	3.90	3.84	3.71	4.50	4.35	4.20	4.06	3.89	4.20	4.09	4.11	3.89
26.	4.86	4.59	3.17	3.52	3.32	3.57	4.17	4.27	3.97	4.56	4.63	4.07	3.64	4.52	4.67
27.	3.77	4.00	4.13	4.21	4.08	4.14	4.44	4.46	4.23	3.63	3.95	3.80	3.82	4.19	3.89
28.	3.50	4.15	4.42	4.59	4.08	4.00	4.61	4.31	4.63	3.81	4.21	4.07	4.00	4.07	4.33
29.	3.45	3.82	3.54	3.69	3.76	3.57	3.17	3.62	3.89	3.06	3.68	3.07	3.36	3.59	3.44
30.	4.27	4.46	4.46	4.17	4.12	4.07	3.94	4.23	4.09	4.31	4.42	3.87	3.68	4.19	4.67
31.	3.86	3.72	4.50	4.10	3.84	4.21	4.56	4.08	4.00	3.88	4.16	4.07	4.27	4.04	4.44
32.	3.68	3.49	4.50	3.93	3.88	4.29	4.44	4.23	4.03	3.69	3.84	4.13	3.86	3.89	4.33
33.	3.18	3.28	4.13	3.62	3.64	3.86	4.22	3.88	3.71	3.19	3.63	3.87	3.55	3.56	3.89
34.	3.68	3.85	4.38	3.86	3.84	3.93	4.50	4.08	3.97	3.88	3.79	4.07	3.91	4.00	4.00
35.	3.32	3.33	4.25	3.83	3.72	3.71	4.39	3.88	3.89	2.94	3.53	3.67	3.50	3.78	3.56
36.	3.18	3.44	4.17	3.55	3.72	3.71	3.89	3.58	3.63	3.06	3.63	3.27	3.32	3.74	3.67
37.	3.55	3.67	4.17	3.90	3.76	3.79	4.06	3.77	3.77	3.06	3.37	3.40	3.77	3.67	3.89
38.	4.45	4.10	4.58	4.52	4.36	4.29	4.78	4.27	4.63	4.06	4.53	4.47	4.23	4.48	4.22
39.	4.09	4.23	4.50	4.38	4.12	4.29	4.44	4.35	4.29	3.63	3.89	4.00	3.91	4.15	4.00
40.	3.36	3.90	4.38	4.17	4.08	4.14	4.39	4.38	4.51	3.38	3.79	4.20	3.82	4.07	4.33
41.	3.73	4.08	4.17	3.69	3.68	4.07	4.00	4.19	3.77	3.94	4.05	3.87	3.68	4.00	4.44
42.	3.86	3.95	3.71	3.24	3.80	3.86	3.72	3.65	3.34	2.69	2.89	3.13	3.00	3.44	3.00
43.	3.41	3.77	3.71	3.55	3.88	4.14	4.06	3.44	3.20	2.88	2.95	2.87	2.91	3.33	3.22
44.	3.32	3.23	3.71	3.28	3.96	4.36	3.94	2.88	2.40	3.19	2.63	2.80	2.45	3.52	2.67
45.	3.50	3.36	3.75	4.00	3.64	3.93	2.78	3.38	3.49	3.31	3.53	3.07	3.14	3.96	3.67
46.	3.73	3.28	3.75	3.76	3.64	3.86	3.11	3.38	3.74	3.19	3.26	3.07	3.36	3.74	3.33
47.	3.64	3.46	3.79	4.21	3.68	4.14	3.50	3.77	3.97	3.44	3.63	3.27	3.64	4.11	3.44

TABLE XXV (CONTINUED)

Competency	Vo. Ag.		Bus. & Off.		Dist. Ed.		Health	Home Ec.		Ind. Arts		Tec. Ed.		T & I	
	T n=22	S n=39	T n=24	S n=29	T n=25	S n=14	T n=18	T n=26	S n=35	T n=16	S n=19	T n=15	S n=22	T n=27	S n= 9
48.	3.23	3.44	3.17	4.14	3.56	3.93	3.72	3.65	4.20	3.69	3.58	3.67	3.86	3.59	3.44
49.	3.95	3.59	2.29	2.76	2.56	3.50	1.94	3.31	3.14	2.13	2.11	1.93	1.95	2.74	2.11
50.	3.77	3.54	3.38	3.52	3.68	3.93	3.28	3.92	3.46	2.63	2.89	2.80	2.77	3.52	2.78
51.	3.64	3.67	3.67	3.90	3.88	3.71	4.22	3.62	3.80	3.06	3.37	3.40	3.86	3.63	3.67
52.	4.23	3.92	3.96	4.14	4.20	4.14	4.17	4.04	3.91	3.56	3.58	3.93	4.00	4.04	3.22
53.	3.91	3.56	4.54	4.10	4.24	4.21	3.11	3.31	3.57	3.13	3.32	4.00	4.14	4.33	3.67
54.	3.09	3.13	4.13	3.72	3.64	4.00	3.33	2.85	3.06	2.94	2.74	3.47	3.64	3.41	3.33
55.	3.23	3.28	4.29	4.03	3.52	4.07	4.33	4.08	3.43	3.56	3.58	3.80	4.14	3.56	4.00
56.	3.55	3.54	4.38	3.90	4.08	3.71	4.28	4.08	3.43	3.75	3.74	4.13	3.45	3.96	4.11
57.	3.50	3.67	4.08	3.83	3.80	3.86	4.06	3.92	3.74	3.75	3.89	3.53	3.73	3.74	4.44
58.	3.05	3.28	3.29	3.59	3.40	3.71	3.28	2.92	3.17	3.50	3.74	3.47	3.50	3.67	4.00
59.	3.18	3.59	3.63	3.62	3.16	3.43	4.00	3.88	3.26	3.94	3.74	3.67	3.23	3.67	4.33
60.	3.95	3.74	3.75	3.72	3.40	3.79	4.00	3.73	3.60	3.88	3.79	3.53	3.14	3.63	4.22
61.	2.95	3.31	3.88	3.62	3.64	3.93	4.11	3.15	3.40	3.13	3.53	3.67	3.36	3.63	3.56
62.	2.86	2.97	3.92	3.34	3.36	4.14	3.06	2.77	2.94	2.56	3.16	3.40	3.50	3.48	3.67
63.	3.09	3.38	3.79	3.93	3.24	3.93	2.83	3.15	3.46	2.81	3.68	3.33	3.45	3.85	3.67
64.	2.55	3.13	3.04	2.90	2.84	3.57	2.39	2.73	2.37	2.88	2.79	2.33	2.18	2.67	2.11
65.	3.36	3.46	4.25	4.03	4.12	4.36	4.28	4.08	4.29	3.81	3.89	3.73	3.59	3.81	4.00
66.	4.41	3.92	4.25	4.10	4.44	4.21	3.89	4.23	4.11	3.75	4.11	3.67	3.82	4.26	4.11
67.	4.45	4.10	4.42	4.41	4.64	4.43	4.33	4.62	4.51	4.19	4.37	3.87	4.05	4.44	4.33
68.	4.05	3.92	4.04	4.17	4.36	4.43	3.61	4.00	4.26	3.75	3.95	3.47	3.82	4.15	4.11
69.	3.77	3.97	3.88	4.10	4.48	4.64	3.72	3.96	4.26	3.44	4.11	3.47	3.73	3.96	4.00
70.	3.95	3.77	3.88	3.93	4.20	3.93	3.61	3.85	4.11	3.00	3.63	3.33	3.50	3.81	4.22
71.	3.59	3.41	3.96	4.07	3.72	4.00	2.94	3.27	3.77	3.19	3.42	3.40	3.86	3.89	4.11

TABLE XXV (CONTINUED)

Competency	Vo. Ag.		Bus. & Off.		Dist. Ed.		Health	Home Ec.		Ind. Arts		Tec. Ed.		T & I	
	T n=22	S n=39	T n=24	S n=29	T n=25	S n=14	T n=18	T n=26	S n=35	T n=16	S n=19	T n=15	S n=22	T n=27	S n= 9
72.	3.68	3.54	4.29	4.17	4.56	4.50	2.72	3.46	3.80	3.50	3.68	4.13	4.23	4.30	4.33
73.	3.00	3.05	3.75	3.69	3.64	4.29	3.22	3.31	3.66	3.13	3.58	3.80	3.77	3.81	4.11
74.	3.86	3.77	3.67	3.62	4.00	4.21	3.39	3.69	3.63	3.19	3.58	3.33	3.27	3.70	3.89
75.	4.59	4.44	4.08	4.17	4.16	4.29	3.22	4.46	4.46	4.00	3.95	3.53	3.73	4.00	3.89
76.	3.55	3.79	3.96	4.07	3.76	3.79	4.39	4.08	4.17	3.75	3.68	3.87	3.91	3.89	4.11
77.	4.00	3.87	4.17	4.48	4.20	4.00	4.44	4.46	4.37	3.94	4.21	4.27	4.32	4.48	4.44
78.	4.27	4.13	4.29	4.48	4.32	4.14	4.39	4.54	4.46	3.94	4.05	3.93	3.95	4.26	4.56
79.	3.59	3.87	4.00	3.76	3.76	3.93	4.11	3.92	3.97	3.44	3.74	3.67	3.64	3.59	4.00
80.	3.68	3.79	4.04	3.86	3.84	4.00	4.11	3.96	3.89	3.44	3.68	3.67	3.86	3.74	4.00
81.	4.23	4.10	4.42	4.10	4.36	4.07	4.22	4.31	4.40	4.06	4.11	4.13	3.50	4.22	4.44
82.	3.59	3.97	3.79	3.72	3.60	4.00	4.17	3.81	3.80	3.25	3.68	3.87	3.36	3.59	3.89
83.	4.00	4.03	3.75	3.79	4.48	4.36	3.25	4.04	4.11	3.63	3.89	3.13	3.45	3.85	3.67
84.	4.09	4.23	3.63	3.86	4.24	4.29	3.19	3.85	4.09	3.56	3.68	3.20	3.55	3.67	3.22
85.	3.95	4.08	3.75	3.90	4.16	4.14	3.19	3.96	4.09	3.50	3.74	3.00	3.55	3.63	3.56
86.	3.91	4.13	3.63	3.86	4.08	4.21	2.75	3.96	3.80	3.06	3.42	2.93	3.36	3.48	3.11
87.	4.05	3.85	3.46	3.62	3.64	3.79	2.88	3.81	3.66	3.06	3.47	3.00	2.77	3.48	3.00
88.	4.05	3.79	3.58	3.76	4.12	4.14	3.63	4.08	3.94	2.94	3.42	3.33	3.32	3.52	3.56
89.	3.95	3.95	3.71	3.72	4.36	4.29	3.25	4.00	4.06	3.19	3.68	3.13	3.09	3.67	3.00
90.	2.95	3.38	2.92	3.48	3.24	3.43	3.13	3.38	3.57	2.56	3.16	2.40	3.00	2.93	3.33
91.	2.68	3.13	2.58	3.21	2.52	3.00	2.63	2.54	2.86	2.31	2.84	2.60	2.91	2.67	2.67
92.	3.95	4.08	3.63	4.28	3.76	3.64	3.25	3.73	4.20	3.94	4.00	2.93	3.32	3.37	4.22

T = Teachers
S = Students

VITA

Zed Farris DeVaughan, Jr.

Candidate for the Degree of

Doctor of Education

Thesis: COMPETENCIES NEEDED BY VOCATIONAL AND TECHNICAL EDUCATION TEACHERS AS RATED BY SELECTED GROUPS

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